# DOCUMENT RESUME

ED 039 333 VT 010 758

| | |
|---|---|
| AUTHOR | Liner, Hugh L., Ed. |
| TITLE | Vocational Agriculture in the Changing South. Proceedings of a Two Day Conference (North Carolina State University, Raleigh, North Carolina). |
| INSTITUTION | North Carolina Univ., Raleigh. N.C. State Univ. Agricultural Policy Inst. |
| REPORT NO | API-Ser-41 |
| PUB DATE | Oct 69 |
| NOTE | 125p. |
| EDRS PRICE | EDRS Price MF-$0.25 HC-$6.35 |
| DESCRIPTORS | *Conference Reports, *Educational Needs, *Educational Programs, Employment Opportunities, Employment Qualifications, Rural Environment, Student Needs, Teacher Education, *Vocational Agriculture, *Vocational Agriculture Teachers |

ABSTRACT

Changes occurring in the rural South and the changing educational needs of the southern youth were topics of this conference. Consideration was also given to job opportunities, role of vocational education in developing employee traits and providing training desired by employers, training vocational agriculture teachers, and relationships of vocational agriculture with other organizations and agencies. The 64 delegates were state supervisors, superintendents, principals, teacher-trainees, and teachers from Georgia, South Carolina, and North Carolina. Speeches were: (1) "The Changing Scene in Agriculture" by E.W. Jones, (2) "Vocational Agriculture in the Changing Scene" by C.C. Scarborough, (3) "The Rising Costs of Poor Education" by C.E. Bishop, (4) "What We Are Looking for in Our Employees" by C.F. Lane, (5) "Occupational Training Opportunities for Rural Youth" by C.H. Rogers, (6) "Career Orientation Concepts Applied to Public School Students in Rural Schools" by J.R. Clary, (7) "Possibilities of Exemplary Programs in Vocational Education" by C.V. Bert, (8) a panel discussion on changes needed in future vocational agriculture programs, and (9) "Linkage of Vocational Agriculture with Other Organizations and Agencies for the Future" by S.C. Mayo. (SB)

ED039333

# VOCATIONAL AGRICULTURE
# IN THE
# CHANGING SOUTH.

Proceedings Of A Two Day Conference By
The Agricultural Policy Institute
North Carolina State University
Raleigh, North Carolina

Agricultural
Policy
Institute

Series
41

October 1969

Edited By
Hugh L. Liner
Extension Associate Professor of Economics
North Carolina State University

U.S. DEPARTMENT OF HEALTH, EDUCATION
& WELFARE
OFFICE OF EDUCATION
THIS DOCUMENT HAS BEEN REPRODUCED EXACTLY AS RECEIVED FROM THE PERSON OR ORGANIZATION ORIGINATING IT. POINTS OF VIEW OR OPINIONS STATED DO NOT NECESSARILY REPRESENT OFFICIAL OFFICE OF EDUCATION POSITION OR POLICY.

# PREFACE

As a consequence of the many changes taking place in the rural areas of the South and the significance of these changes to vocational agriculture, a conference sponsored by the Agricultural Policy Institute and the Department of Agricultural Education at North Carolina State University was held in Raleigh, North Carolina. Sixty-four persons were selected to attend. The audience consisted of state supervisors, superintendents, principals, teacher-trainees and teachers from Georgia, South Carolina and North Carolina.

A major portion of the conference focused attention on the changing scene in the rural South and on the changing educational needs of the youth residing in these areas. Consideration was given to the availability of job opportunities and the individual traits and training that employers desire of potential employees. The role that vocational education will play in assisting with developing these traits and in providing this training was discussed at length.

The final session of the conference was devoted to discussions of changes needed in training vocational agriculture teachers for the future and future relationships of vocational agriculture with other organizations and agencies.

Members of the Conference Planning Committee were as follows: H. E. Beam, Caldwell Technical Institute; A. P. Bell, A & T University; L. E. Bennett, North Carolina State University; E. T. Benton, Cleveland High School; C. D. Bryant, North Carolina State University; V. B. Hairr, North Carolina State Department of Public Instruction; John Tart, Johnston County Board of Education; and Hugh L. Liner, North Carolina State University, chairman.

## TABLE OF CONTENTS

Page

THE CHANGING SCENE IN AGRICULTURE
E. Walton Jones . . . . . . . . . . . . . . . . . . . . . . 1

VOCATIONAL AGRICULTURE IN THE CHANGING SCENE
C. Cayce Scarborough . . . . . . . . . . . . . . . . . . 7

THE RISING COSTS OF POOR EDUCATION
C. E. Bishop . . . . . . . . . . . . . . . . . . . . . . 25

WHAT WE ARE LOOKING FOR IN OUR EMPLOYEES
Claud F. Lane . . . . . . . . . . . . . . . . . . . . . . 35

OCCUPATIONAL TRAINING OPPORTUNITIES FOR RURAL YOUTH
Charles H. Rogers . . . . . . . . . . . . . . . . . . . . 47

CAREER ORIENTATION CONCEPTS APPLIED TO PUBLIC SCHOOL STUDENTS IN RURAL SCHOOLS
Joseph R. Clary . . . . . . . . . . . . . . . . . . . . . 63

POSSIBILITIES OF EXEMPLARY PROGRAMS IN VOCATIONAL EDUCATION: IMPLICATIONS FOR VOCATIONAL AGRICULTURE
C. Virginia Bert . . . . . . . . . . . . . . . . . . . . 89

PANEL DISCUSSION
CHANGES NEEDED IN SHAPING VOCATIONAL AGRICULTURE PROGRAMS IN THE FUTURE
J. T. Abrams . . . . . . . . . . . . . . . . . . . . . . 101
John Tart . . . . . . . . . . . . . . . . . . . . . . . . 107
J. L. Branch . . . . . . . . . . . . . . . . . . . . . . 113

LINKAGES OF VOCATIONAL AGRICULTURE WITH OTHER ORGANIZATIONS AND AGENCIES FOR THE FUTURE
Selz C. Mayo . . . . . . . . . . . . . . . . . . . . . . 119

# THE CHANGING SCENE IN AGRICULTURE

E. Walton Jones
Acting Administrative Dean for University Extension
North Carolina State University

The scene in agriculture has been changing for a long time. There is very little that a person can say about this changing scene at this time that could not have been said many times within the past twenty years. The scene that we are now facing has been evolving at a fairly continuous rate over the last several years.

Many changes have taken place in agriculture, but the basic changes are related to increasing productivity of resources and declining employment in this sector of our economy. Total agricultural employment has declined in almost every year since the end of World War II. It was 8.6 million in 1945 and only 4.6 million in 1965.

The most significant aspect of the changing national agricultural scene in the South is that employment in agriculture has not declined as fast as it has in the nation. The southern region has nearly twice the percentage of its total employment in agriculture as the nation. North Carolina has one of the highest concentrations of agricultural employment of any state in the United States.

Probably the most significant development that will take place in southern agriculture in the years ahead is a more rapid decline in employment in agriculture. The region must move closer to that of the nation in its distribution of employment among nonfarm industries. One of the basic reasons why we are still behind is because of the existence of a few crops that have effectively resisted mechanization. The principal one is tobacco and it appears that there are breakthroughs ahead in this area.

A few figures may be helpful in getting some idea of the magnitude of employment changes that might be expected in agriculture in the South within the next few years. I will use some figures that were recently computed to make this point. North Carolina will possibly have the most drastic reduction in employment in agriculture of any state in the South. This is because of the concentration of employment in the tobacco industry in this state.

It is predicted that employment in agriculture in North Carolina will decline by an average of 10,000 per year between 1968 and 1975. It has been stated further that unless the proper adjustments are made to assure alternative employment opportunities for agricultural labor, that the technological developments that are in the making could render 50 percent of the farm labor force obsolete by 1975.

There are some who would look at this decline in agricultural employment as a catastrophe or as an undesirable event. However, if we put the situation into proper perspective, we will recognize that this is an essential aspect of the economic development process. The South cannot catch up with the rest of the nation in economic development until it has reduced drastically the labor force that is still in agriculture.

The poor industry-mix in North Carolina that is attributable largely to high levels of employment in agriculture cost the state about 6,000 jobs between 1950 and 1960. It cost the state another 3,300 jobs between 1960 and 1967. Further analysis using the shift-share technique showed that the industry-mix effect on employment in North Carolina is not significant when agriculture is not considered.

It is important that we recognize the necessity of reducing the number of workers that we have in agriculture in the South. There is no nation on record in the history of the world that has achieved a high level of economic development until it achieved a favorable balance of persons in the various industrial classes. In order to achieve the level of development that we are capable of achieving in the South, we must reduce the number of workers in agriculture relative to the number in manufacturing and services.

Some of the technological problems of southern agriculture still must be solved. We still have a challenge in developing the basic engineering technology necessary to completely mechanize the harvesting and marketing of tobacco--also some of our fruit and vegetable enterprises. We must also learn how to organize our farms such that these technologies can be applied economically. It is not only the lack of engineering technology, but a lack of organizational technology that has prevented full mechanization. The farms in the South are under-managed, under capitalized and under-technologized relative to the rest of the nation.

Another major factor that has held southern agriculture back and has tended to keep the region stagnant is the traditions associated with agriculture. We still hold firm to the family farm concept in this region. There is no reason why this concept cannot be maintained intact if we have the proper interpretation of it. However, in the attempt to preserve this concept, several myths have been created. These myths may have serious implications for the southern region.

An example of one of these myths is the bad image that has been created regarding the corporate farm. It has been cast as a villain that could destroy the family farm. Certainly this is not true if one looks at it in the right context. As a matter of fact, the family farm may be possible only through the development of the corporate farm in the region. It is highly unlikely that the kind of financing that is needed in today's agriculture can be arranged without the development of corporate farms which will permit the transfer of debt from one generation to another.

Another technique that could help overcome the structural problems of southern agriculture and bring about the kinds of adjustments necessary for development is that of vertical integration. This organizational technique has transformed the poultry industry into one of the most highly efficient industries in this country. It may be necessary for this or some technique to be adopted on a grand scale throughout the region in order to achieve full agricultural development.

To a large extent, the underdevelopment of agriculture within the region is an educational problem. The basic problem is not the small farms. They are symptoms of a lack of management skills and trained manpower. It will do very little good to provide additional capital and other resources for small farmers. We must recognize the fact that there is some good reason why they are small from the outset.

The educational establishment faces a tremendous challenge in providing skilled managers and agricultural technologists that can move southern agriculture in line with the rest of the nation. I have been accused of saying that the two problems of southern agriculture are that the large farmers are lazy and the small farmers stupid. I didn't say it but this is a dramatic way to express it. The educational establishment is really challenged to do something with the large farmer in the South who is satisfied with the status quo.

There are several dimensions to the changing scene in agriculture as it relates to education. The dimension that I have discussed to a large extent thus far has had to do with what I would call extension or adult education--teaching the existing group of farm managers and farm owners to make the adjustment necessary to increase their productivity.

Another aspect of this adult education relates to teaching a large number of farm workers how to function in nonfarm jobs. The 10,000 per year reduction in farm workers in North Carolina will not all come from retirement. Some must be trained for nonfarm work or what to do with their unemployment payments. I do not have to tell you the difficulties involved here. There were more than 19 million rural adults in 1960 with less than a high school education. Those who will be moving out of farming will be the most ill-prepared for any kind of employment.

An important long-term dimension to the educational problem is the training of new entrants into agriculture. These new entrants will need to be sophisticated businessmen, technologists and scientists.

The agricultural scene of today and tomorrow will not include many "hay seed" country boys.

A comprehensive educational program for agricultural or rural people must include opportunities for those boys who want a complete change of scenery. There are, fortunately, many rural youth who want to "do their thing" in urban America. These youth must be given an opportunity to compete on an equal footing with youth who are already there. It is unfortunate that many of our rural schools still are not up to city standards.

The factor that must be kept in mind continually in our educational programming is that we live in a dynamic economy with agriculture representing the dynamo. It is the agricultural sector that has provided the basic thrust for economic growth in this country.

We must gear our educational programs to the dynamics of this system. In an economy where it is predicted that a person must change jobs 12 times in a lifetime, it would be foolish to emphasize technical training at the expense of basic transferable skills. It would be equally foolish to think that a person could function in the kind of technical agriculture that we have without technical training.

There is always the problem in an economy that depends on change for progress of those who are threatened by change. The vested interests that are built up may try to freeze the system in place. Specifically, the agricultural establishment may try to prevent the employment in agriculture from declining. The U. S. Department of Agriculture may resent the allocation of research funds into other areas.

I hope the agricultural establishment will recognize more and more that this system serves the total economy. Persons employed in the agricultural economy are not there just to serve the farmer. As a matter of fact, the farmer has had all the help he can afford. Too many people are unaware that practically every technological breakthrough in agriculture eventually hurts the farmer from his position as a producer.

The task of educating the labor force to man the tremendous agricultural plant in this country is overwhelming. This is more than enough to absorb the total resources of the agricultural establishment. However, let us recognize that the general public does not understand the technicalities of agribusiness. We still have not convinced the general public that we are not in business to serve the farmer. We still have not convinced the public that agricultural workers are working for the consumer.

In summary, the agricultural scene today is one of large, scientific production and marketing units. A highly trained labor force is necessary to operate these units. It is a dynamic scene in that the number of units are becoming fewer as well as more sophisticated. A continuous stream of labor resources is flowing out of this setting into the urban scene. The educational establishment must provide the training for the high level jobs within agriculture and help provide the skills necessary for the outflow to be absorbed in the nonfarm economy.

# VOCATIONAL AGRICULTURE IN THE CHANGING SCENE*

C. Cayce Scarborough
Department of Agricultural Education
North Carolina State University

Someone has suggested that a look at any program, if the look is to have any depth, must include at least three phases. These phases are: (1) Where are we?, (2) How did we get here?, and (3) Where do we go from here? And, if you are a man of action, you would want to add a fourth phase: How do we get from where we are at the present time to where we want to be at some specified future date?

Of course, everyone who tries to be an expert in analysis of programs would not agree with these phases as stated. The more existentialist among us would insist that it really makes little difference how we got where we are, the important thing is, "Here we are, what do we do now in this situation?" It is recognized too that a program can be seen from many viewpoints. In view of the time factor, this paper will use the four phases for an outline, skipping lightly over some of the phases.

## (1) Where are we?

As with some other programs, for several years we were told by leaders that vocational agriculture was "at the crossroads." Apparently this expression means that the old, clear-cut route is no longer available. We are at a crossroad and some decision-making must be made as to future direction. Apparently we passed the crossroads and, with a strong push from the Vocational Act of 1963, chose the broader road, maybe even an Expressway or an Interstate Highway. "Agriculture Is More Than Farming" became our slogan, appearing on billboards as well as in the vocational agriculture classrooms and, of course, in speeches at conferences.

---

*The discussion will be confined largely to the high school program of vocational agriculture, not including the adult program.

Carrying the analogy of roads and highways a bit further, it appears that our broader program of vocational agriculture has many advantages over the narrow road leading to the farm. Yet, as with the superhighways, there are some problems here too. There are accidents, some fatal. Some jump over the median, and some even head the wrong way, causing pileups and accidents. Many people prefer to drive on the older, quieter roads, seeing more of the country as they travel.

It is said that any analogy will break down if you carry it far enough and maybe this one is about to that point. But I do believe that it is safe to characterize where are we in vocational agriculture as being in a broader program with a considerable number of people not ready nor equipped to participate effectively in these programs. Everywhere curricula in vocational agriculture are being adjusted or drastically changed--at least theoretically. Course designations have been changed. The old, basic four courses have been increased to a dozen or more, many of them highly specialized, such as pulpwood production. To illustrate this point, a listing of courses now being offered in North Carolina is attached. Still other courses are being planned.

Considerable frustration is experienced by some in such a change process. Some of the old reliable "musts" for any effective vocational agriculture program anywhere do not seem to fit into the new situation. We are not certain what might make adequate substitutes. For example, the home farm visit has been the key to many of the fine things in vocational agriculture. Not only for the supervised farming program, but for better parent-student-teacher relations. This was the main reason that the agriculture teacher knew the student, the parents and the community better than anyone else in the community. With one or two big high schools instead of the four, six, or eight smaller ones, the home visit becomes more difficult. Besides, many of those enrolled do not live on a farm. So, even if the basic idea of supervised practice is continued, it may be down at the feed and seed store under the supervision of someone else, setting up an entirely different set of relationships.

Some of the other standard "musts" of vocational agriculture programs needing reexamination are the following:

(1) The Ag teacher must be farm reared.
(2) The Ag teacher must visit the homes of each student he teaches.
(3) The Ag teacher must be able to teach "everything"--crops, livestock, horticulture, farm management, agricultural engineering, forestry, etc.
(4) The Ag teacher must have a degree in Agricultural Education.
(5) The Ag teacher must be able to teach adults as well as youth of all ages.

So, we might summarize the phase of "Where we are" by saying that we are in the process of change, trying to update old ideas worth saving (supervised practice for example) discarding some (establishment in farming as a major objective for all those enrolled) and adding some new ideas, such as specialized teaching in multiple teacher departments, and off-farm agricultural occupations as an important part of all programs.

It is my personal belief that, in general, we have tried to make changes in all programs on a statewide basis without enough active involvement of the teachers who are the keys to getting the changes actually made. For example, it is my belief that the curriculum in vocational agriculture in a state is what the teachers in that state are doing in their classes day by day and the related experiences by the students. This may or may not be what the state supervisor says it is, what the teacher educator says it should be, or even as it is outlined in the state curriculum guide. So, it is my guess that not as many teachers have made as many changes in their teaching as we like to think, in spite of a number of extremely promising pilot programs. This is not a criticism of teachers, but recognition of a neglected major step in any change process. Another way of summarizing "Where we are" is to look at Lippitt's adaptation of Lewin's phases of planned change. These are as follows:

1. Development of a need for change ("unfreezing")
2. Establishment of a change relationship
3. Working toward change ("moving")
    a. Clarification of the client system's problems
    b. Alternative routes; establish goals and intent to act
    c. Transform intentions into actual change efforts
4. Generalization and stabilization of change ("freezing")
5. Achieving a terminal relationship.[1]

What I am saying is that if we see the state leaders as the change agent and the teachers of agriculture as the client system, and see where we are in terms of the above phases of the change process, I believe that we may be working hard on Phase 4 after working hurriedly for a short time in Phase 3 and having skipped over Phases 1 and 2. The first two phases were neglected, I believe, because we mistakenly thought that they were already obvious--a dangerous word in any change process. Bear in mind that the key to Phase 1 is "problem awareness" and a "desire to change with help from outside." I believe that a large number of leaders and teachers are not past Phase 1 in terms of some of the changes being proposed.

(2) How did we get here?

We got where we are in vocational agriculture partly from the push and pull of changing conditions, many beyond the control of the people in the programs. Perhaps this is the story of change in any program as someone said about a somewhat balky conservative, "He was pulled struggling and against his will into the 20th century." Only a few of the major changes affecting vocational agriculture will be mentioned.

---

[1] The Dynamics of Planned Change, Lippitt, Watson and Westley.

Much has been said about the changes in agriculture, but not so much in education. Both have caused major shifts in vocational agriculture programs. The change in agriculture having most influence on vocational agriculture is perhaps the shift to larger commerical farms. In education, easily the greatest change in vocational agriculture has resulted from school consolidation. Cutting across both agriculture and education is the rapid change in the community, especially the greatly increased rural nonfarm population.

If we will picture the rural South of 1914-20, the setting for the early development of the first programs in vocational agriculture, and contrast with today's rural area, the impact of changes in agriculture and education can be readily seen. If a vocational agriculture program fit the community situation in 1919, then it would hardly fit our situation 50 years later. Some critics of vocational agriculture have suggested that too many programs are geared to the conditions of the past than to the present and the rapidly approaching future. The report of the President's National Advisory Committee on Rural Poverty was done by a blue ribbon committee with an able staff headed by Dr. Ed Bishop who by training, experience and reputation must be classed among those who "know what they are talking about." This report lumped vocational agriculture with some other rural programs and labeled them as "relics from an earlier era."[2]

If this is a valid statement, it may be the result of extremely conservative leadership, particularly at the national level. It can be readily documented that we held tenaciously to certain objectives too many years beyond their validity. Two examples: The early controlling purpose for those enrolling in vocational agriculture was "establishment in farming." This was never a reasonable objective or even educationally sound for a 14-year old boy to make before enrolling.

---

[2] The People Left Behind. A report by the President's National Advisory Committee on Rural Poverty. September, 1967.

Fortunately, many teachers of vocational agriculture were too much interested in helping the boy develop his best abilities, whether or not it was farming, that little attention was paid to this mandate. However, officially, establishment in farming was the major purpose for those enrolling in vocational agriculture.

Another example of keeping on beyond hope of validity is the FFA. A study by Fred Manley of the stated official objectives of the FFA revealed no changes of any significance in the nearly 40-year history of the organization.[3]

The history phase of this report must be brief. To summarize, the program of vocational agriculture developed to offer better educational opportunities for farm boys from small farms in small high schools of 50 years ago. Some of the programs were so successful it was difficult to make changes as rapidly as needed. Thus, we are now at a point of trying to know what to hang on to, what to revise, what to discard and what new programs to start. How well we make these decisions will determine the future, if any, for vocational agriculture.

(3) Where do we go from here?

The Vocational Education Act of 1963 and the Vocational Education Amendments of 1968 are the official indicators of where we can go, insofar as federal financing influences programs. (In the past 50 years this has been a major influence.) The main difference in these two recent Acts and previous vocational education legislation may be summed up as follows:

1. Emphasis on people rather than programs. Must be "suited to their needs, interests and abilities."

2. Access is a key word. "All persons in all communities shall have ready access--."

3. Vocational Education is to be "of high quality and realistic in terms of actual or anticipated opportunities for gainful employment."

---

[3] Fred W. Manley, "Socio-Economic Development Affecting Vocational Agriculture as Related to the Objectives of FFA" (Masters Degree Study). 1964. N. C. State University Library, Raleigh.

4. More involvement of more people in program development outside of "the establishment." A State Advisory Council, appointed by the Governor, is mandatory. So is a public hearing on the State Plan.

5. Special programs will be available for those with socio-economic and physical handicaps.

My own personal hope, and perhaps bias, is that the vocational teachers will develop a continuous program of professional improvement. This could be a major breakthrough for vocational teachers who have frequently had no funds and little encouragement for professional improvement. Lowell Burkett, Executive Director, American Vocational Association, had this to say on this subject.

> For the vocational teacher himself, the implications of the new act are nearly without limit. It provides for his professional preparation and his further professional development. It provides him with new curricular guidance and curriculum materials development. It will mean new research opportunities, and it will help him reach into new occupational fields. It will mean new and expanded facilities and better use of audiovisual materials and equipment. In short, the Vocational Amendments of 1968 have everything needed to glamorize the position of any vocational teacher in the country who is not afraid to adopt a new look.[4]

Will vocational agriculture and the ag teacher share in this bright, even glamorous, future predicted by the AVA Executive Director? I do not think so unless, as stated, most of our teachers can really adopt a new look. (Note that Lowell Burkett says "adopt a new look." This implies much more than only taking a new look.) Whether a large majority of our teachers do indeed adopt a new look may be dependent upon the leadership in the respective states and nationally. This needed leadership must come from the teachers themselves as well as from those in administrative positions at the state, county, and local levels. If the idea of adopting a new look in vocational agriculture is missing at any of these levels, then programs of vocational agriculture may well be "a relic of the past."

---

[4] American Education, March, 1969.

Some leaders in Agricultural Education have developed a list of "musts" if vocational agriculture is to survive.[5] I would like to close by giving my list of these "musts" for which I assume responsibility but hasten to give credit to Dr. T. R. Miller and other Agricultural Education faculty members for contributions to my thinking at numerous informal seminars on this topic.

(1) Objectives: Agricultural Subject Matter vs Agricultural Occupations

Apparently vocational education is to be seen as occupational education. Someone has suggested that it should be called "Pay Check Education." Others have suggested that it is education for work, and that everyone, young or old, rich or poor should be able to work effectively at whatever educational level he may leave school and begin his work career, or if he starts working part time without leaving school. The question, I believe, is what part vocational agriculture can take effectively in this work-oriented education for our young people.

(2) The Structure of the School and Curriculum

Will vocational agriculture be built into the structure of the school in providing occupational education? Evidence seems clear that more and earlier emphasis on occupational education will be tried during the next few years. The question is whether vocational agriculture will be seen as one approach in meeting these needs for occupational education below the traditional vocational education programs from 9th grade up.

(3) Meeting Special Needs

Will vocational agriculture be seen as one opportunity for those with special needs to improve their lot through better education leading to employment and self-support? The question is whether vocational agriculture can adjust to be seen as a major means of meeting the occupational education needs of those who are not able to meet these needs through the "regular program."

---

[5] One such list was given by Dr. A. H. Krebs, Professor and Head, Agricultural Education, VPI, in a lecture at Ohio State in March, 1969. These are attached to this paper.

(4) Professional Needs of Teachers

Will the teacher of vocational agriculture "keep up" so that he can continue to be an effective educational leader in the community? The question is whether the local school administrators and the state-level leaders will see continual professional improvement of teachers of vocational agriculture as a "must" or as a choice of convenience.

(5) Leadership at the National Level

There are now no leadership positions in Agricultural Education at the national level. The position of Chief, Agricultural Education, U. S. Office of Education, has been downgraded several times in title, prestige, and responsibility. The efforts being made by NVATA and other groups to get more aged positions reestablished may get some results, but these will amount to very little in my opinion, if the positions are not adequately financed and staffed with able people with freedom to exert leadership. The question, then, is whether those positions of leadership can be established and filled with people who can offer needed leadership.

(6) Programs or People?

The 1963 and 1968 Vocational Acts give emphasis to people--to individual needs for occupational education. This is quite different and considerably more difficult than giving emphasis to programs. It is much easier to develop programs than to develop people. The question is whether we will be able to give emphasis to the interests and needs of people in developing programs in occupational education in agriculture?

(7) Agriculture's Role in Occupational Education

There seems little doubt that there is much interest in more and better occupational education for more people, especially younger people and those with special needs. (The latter group was listed earlier.) The question is whether agriculture will be able to make for itself an important place in the overall occupational education needs.

The manner in which we are able to find answers to these questions as we come to grips with these issues will, I believe, determine where we go from here. Now for a brief look at the action phase.

(4) How do we get from here to where we want to be?

Let's assume that we could agree that our major objective would be to see programs in vocational agriculture become a major part of the overall occupational education program for all students in the public school system. (That long sentence is loaded with assumptions!) However, it is realistic, I believe, that we will see more emphasis on education for the world of work. It may become a required area of study, exploration, and experience for all students. Whether we go this far is a guess, but certainly a greater emphasis is already here. What will determine whether we in the area of agricultural education will have a share in this developing emphasis on education for work? Here are some predictions based upon the validity of the issues and questions listed earlier.

a. Our programs must meet the interests and needs of young people of today.
b. Our programs must be sound educationally. Criteria for soundness in this case would come from research and theories in such areas as vocational development and maturity, occupational choice, level of occupational aspiration, and career patterns.
c. Our teachers must be occupational education teachers using their knowledge and experience to make the area of agriculture contribute to the student's better understanding of the world of work and himself and how he can find his place in the world of work.
d. Our leaders must be change-oriented with enough professional security to try innovative approaches and insist that teachers do the same. Much in-service education may be needed by many of us.

For example, do we have a thorough understanding of behavioral objectives and their implications for vocational agriculture programs.

May I close on a cautiously optimistic note. I believe that we will have vocational agriculture as an important part of occupational education programs if we can see it in the context of the theme of this conference; that is, a part of the changing scene. If we cannot clearly see the changing scene and see how vocational agriculture can be a part of the changing scene contributing to the occupationa education of the youth, then vocational agriculture will indeed become one of the "relics from an earlier era."

# APPENDIX

## Number of Departments of Vocational Agriculture in North Carolina, with Number of Teachers in the Departments, 1968

Departments with one teacher.........265
Departments with two teachers........109
Departments with three teachers...... 30
Departments with four teachers....... 7

## Traditional Patterns of Classes in Vocational Agriculture

### By Subjects

1st Year - Farm Crops
2nd Year - Animal Husbandry
3rd Year - Horticulture
4th Year - Farm Management

### Cross-Sectional

Agriculture I
Agriculture II
Agriculture III
Agriculture IV

## Courses Offered in Vocational Agriculture, High School Classes in North Carolina in 1968-69, and Number of Students

| Course Number | Course Title | Number Enrolled |
|---|---|---|
| 701 | Introduction to Agriculture | 15,462 |
| 702 | Agricultural Science and Mechanics | 10,073 |
| 703 | Agricultural Production | 2,329 |
| 704 | Agricultural Management | 833 |
| 705.1 | Agricultural Construction | 2,383 |
| 705.21 | Agricultural Machinery and Equipment I | 3,635 |
| 705.22 | Agricultural Machinery and Equipment II | 210 |
| 705.3 | General Horticulture | 2,395 |
| 705.41 | Ornamental Horticulture and Landscaping I | 2,413 |
| 705.42 | Ornamental Horticulture and Landscaping II | 112 |
| 705.51 | Forestry (General) | 1,374 |
| 705.52 | Forestry (Pulpwood Production) | 152 |
| 705.6 | Crop and Soil Technology | 435 |
| 705.7 | Livestock and Poultry Technology | 718 |
| 705.8 | Agricultural Chemicals | 13 |
| 705.9 | Agricultural Business Operation and Management | 230 |
| 706.1 | Agricultural Sales and Services I | 112 |
| | Special Needs Students | 226 |
| | Total | 43,110 |

(Boys - 41,194)

(Girls - 1,916)

## Occupational Areas for Agricultural Education Enrollment, Fiscal Year 1966*

| | Enrollment | Percent |
|---|---|---|
| Agricultural Production. . . . | 778,752 | 86 |
| Agricultural Supplies. . . . . | 36,309 | 4 |
| Agricultural Processing. . . . | 28,792 | 3 |
| Agricultural Mechanics . . . . | 22,622 | 2 |
| Horticulture . . . . . . . . . | 10,509 | 1 |
| Forestry . . . . . . . . . . . | 3,812 | -1 |
| Agricultural Resources . . . . | 300 | -1 |
| Other Agriculture. . . . . . . | 26,258 | 3 |
| | 907,354 | 100 |

---

*VOCATIONAL EDUCATION - The Bridge Between Man and Work. General Report of the Advisory Council on Vocational Education. USOE, Washington. 1968.

## Some Job Opportunities in Agriculture*

### Agricultural Production

- Crop Specialty Farmer
- Dairy Farmer
- Farm Equipment Operator
- Farm Manager and Foreman
- Farm Worker
- Fruit Farmer
- General Farmer
- Hatchery Operator
- Landscape Operator
- Landscape Contractor
- Livestock Breeder
- Livestock Farmer
- Nursery Operator and Flower Grower
- Poultry Farmer
- Seed Grower
- Tree Farmer
- Truck Farmer

### Agricultural Business and Service

- Artificial Inseminator
- Custom Machine Operator
- Dairy Technologist
- Farm Machinery Salesman
- Farm Produce Buyer
- Farm Supply and Equipment Store Manager
- Feed Mill Operator
- Fertilizer Salesman
- Livestock Grader
- Nursery Production Worker
- Poultry Inspector
- Timber Buyer
- Veterinarian Assistant

### Agricultural Professions

(Most of these require college degree; some a graduate degree)

- Agricultural Chemist
- Agricultural Economist
- Agricultural Engineer
- Agricultural Writer
- Agronomist
- Animal Husbandman
- County Agent
- Forester
- Landscape Architect
- Plant Pathologist
- Ornamental Horticulturist
- Poultry Husbandman
- Soil Conservationist
- Soil Scientist
- Teacher of Agriculture
- Veterinarian

---

*From brochure, "A Look at Vocational Agriculture in Georgia's High Schools," Vocational Division, State Department of Education, Atlanta.

# Agricultural Education: Some Problems, Issues, and Predictions*

A. H. Krebs, VPI

1. The right of the public to be heard. "It is a safe prediction that a continuing failure to provide for communication with all segments of the public we are supposed to serve through agricultural education will result in programs continuing to serve only parts of that public."
2. The need for a knowledge of teaching. "... the use of persons untrained for teaching as teachers will be the exception rather than the rule."
3. The struggle for identity of vocational agriculture. "I predict that fields of service identification (in vocational education) will survive the current challenge."
4. Leadership for agricultural education. "The N.V.A.T.A. is demonstrating that agricultural educators can take positive action. I predict that the current crisis in agricultural education will result in the development of a strong national leadership within the agricultural education profession."
5. Focus in application. "I predict that those vocational agriculture programs which survive will be those which relate teaching to the development of abilities to perform tasks adults perform to earn a living."

---

*Ohio Agricultural Education News, April, 1969.

# THE RISING COSTS OF POOR EDUCATION

C. E. Bishop, Vice President
Consolidated University of North Carolina

One of the most distinguishing characteristics of the United States is the high value placed upon its human resources. We impute a higher value to human resources than any other society. This is shown in the returns received both for labor and management. It is also evident in the high regard for life itself.

Our nation has long recognized that people are an important part of its wealth. Yet, we have not fully understood the means by which this form of wealth could be enhanced. Traditionally, education was viewed largely from a consumption viewpoint. It was viewed as something to be enjoyed, and all too often only by the elite.

But the rapid rise in the value of the human resource in our society has caused us to rethink many of our education programs. During the 1960's we have become keenly aware of the increase in the value of the human resource in the United States. This increased awareness has been accompanied by unprecedented demands for education and training, and the state and federal governments have initiated vast new education and training programs.

The purpose of this paper is twofold: (1) to examine the reasons for the increase in value of the human resources in the United States economy and (2) to suggest some of the implications for human resource development programs.

## Why the Value of Our Human Resources Is Increasing

It is somewhat paradoxical that the value of the human resource is increasing so sharply in the United States. We know that most improvements in technology are labor saving. That is, they increase the productivity of capital relative to labor and encourage the employment of additional capital. During a period, therefore, in which we are experiencing widespread mechanization and automation of productive processes, it is commonly believed that large-scale displacement of labor and high unemployment are unavoidable. In fact, as we entered the decade of the 1960's, there was very high unemployment and deep concern over the ability of our nation to provide jobs for its people. This situation contrasts sharply with conditions that prevail today when unemployment is very low. Even more puzzling, a recent study by the Center for Priority Analysis of the National Planning Association concludes that a manpower shortage will prevent the United States from achieving during the 1970's the 16 generally accepted national goals developed by President Eisenhower's Commission on National Goals. More specifically, the study concludes that fulfilling present objectives would require an employment of some 10 million more people than are expected to be in the civilian labor force in 1975.[1] Why has our manpower situation changed so drastically?

The value of the human resource in the United States is increasing rapidly because of the increased productivity of manpower. The economic growth of this nation has been accompanied by rapid accumulation of capital. As this capital has been put to work in ever more productive forms, emanating from improvements in technology, the result has been to increase the productivity of the human resource.

---

[1] Leonard Lecht, Manpower Needs for National Goals in the 1970's, Frederick A. Praeger, Publishers, New York, 1969.

Not all human resources, however, have been affected to the same extent by the processes described above. In particular, the demand for skilled and semiskilled manpower has increased sharply in relation to the demand for unskilled manpower. Technological change is accompanied by the creation of new industries. These industries provide new opportunities but often require specific skills. Meanwhile, employment in many existing industries decreases as a result of technological change.

Whether an industry that is being subjected to technological improvements will increase or decrease employment depends upon a number of conditions. As was indicated earlier, most technological improvements tend to result in an increase in the productivity of capital and, therefore, provide incentives to substitute capital for manpower. Technological improvements are not adopted unless they are expected to be profitable; that is, unless the firms adopting the new technology expect their costs of production to be decreased in the range of output in which they expect to operate. But a reduction in costs usually provides an incentive for the firm to expand its output. Conceivably, therefore, improvements in technology can lead to an increase in output and an increase in employment at the firm level. Whether there will be an increase in employment at the industry level depends upon what happens to the number of firms in the industry. In industries in which the price of the product drops sharply as output increases, changes in technology are likely to result in a decrease in employment. This has certainly been the case for farm products. The changes in supply of farm products associated with technological improvements have been large. On the other hand, the increase in demand associated with population growth and improvements in real income has been small, and the nature of the demand for farm products is such that price has decreased rapidly as output increased. Consequently, in order to employ profitably the improvements in technology it has been necessary to decrease sharply both the number of firms producing farm commodities and employment in farming.

Another factor tending to increase the value of the human resource is the fact that new industries must bid resources away from other industries in order to operate. Since the new industries tend to have better technology, the productivity of labor is higher in them and they tend to employ more highly skilled labor. Therefore, technological change itself is a factor contributing to an increase in the value of human resources.

The value of the human resource is also increasing because of our improved ability to develop it. During the current decade there has been a much more widespread appreciation of the fact that education and training are forms of investment.[2] We now know that skills and knowledge are forms of capital that are largely a product of deliberate investment. This investment takes many forms, including general education, vocational education, on-the-job training, migration, health care, housing, nutrition and other forms of investment that improve the quality and productivity of our human resources. We invest in ourselves, and equally important if not more so, society makes a large investment in us.

## Some Implications of the Increasing Value of Human Resources

Increased emphasis is being placed upon education because of the high priority that it is assigned in social choice. Man is a social animal, and social institutions affect both his wants and his ability to achieve his wants. These institutions are deeply rooted in social values. The basic values of society affect our behavior through our customs, codes, rules, etc. They also affect the amount and kind of education provided. They are expressed through out educational institutions. It is through society's institutions that individual and collective actions are shaped and our well-being is determined.

---

[2] T. W. Schultz, "Investment in Human Capital," American Economic Review, March 1961, pp. 1-18.

Society has developed various organizational forms to relate resources and institutions to the goals of man. These organizational forms constitute the delivery system through which social services are provided. Through its organizations, society makes investments in people and in other resources. It is important, therefore, that the people have access to the organizations in order to gain access to the services. This is especially so in our society where increased emphasis is being placed upon personal services and where government is a major provider of services.

The point that I wish to emphasize is that the optimal form and structure of social organization depends upon the prevailing state of technology and the goals toward which social organization is directed. As new technology is created, or as new goals or new problems are identified, a new organization should be evolved to meet these or old organizations should be modified to the extent necessary.

Social scientists have long recognized that significant changes in technology are accompanied by changes in resource combinations and in the size and output of the firm. The consequent tendencies toward specialization and structural change among plants, firms and cities have been emphasized. As a result of technological improvements economic functions have been relocated, population has been relocated, and in many instances access to organizations providing institutional services has become more complicated.

In no area have these changes been more pronounced than in agriculture. During the past 30 years we have observed one of the most massive migrations of human resources in recorded history in the exodus from the farms and the small villages to the urban centers of America. We have witnessed the economic decay of many rural areas from which the migrants departed. Had we looked closely, we would have noticed that millions of Americans in these areas, and especially in the rural nonfarm population, no longer had access to the kinds of private and public investments necessary for rapid economic growth and development. The people and the communities that were unwilling or unable to make the necessary adjustments were left behind.

More recently, we have witnessed the flight of plants from the central cities of the United States and the emergence of serious economic, social and political blight in these cities. Thus, during the last two decades the industrial, occupational, and population structures of both the rural areas and the urban areas have been altered drastically. These changes brought intense pressures for alterations in the delivery system for goods and services.

Although the economic value of the human resource is rising in our society, and the returns from investment in the development of it are high, it is clear that access to education and training programs determines to a large extent who shall participate in the increase. Many people living in rural areas do not have access to the same kinds of investments in education and training that are available to people living in the more densely populated areas. Moreover, in the past, people living in rural areas were regarded as needing less education or a different kind than people in other areas. This assumption now is being challenged.

As the returns from education and training have increased, the costs of failing to obtain a good education have increased. Today, failure to complete secondary school education virtually precludes employment in many occupations. The cost to the individuals who do not complete educational programs is the income that they might have earned if they had graduated. These costs are increasing annually. In like manner, the cost of inferior education, obtained through poor schools or in poor curricula, is increasing rapidly. When people are denied an opportunity to obtain an education and training that is consistent with their particular abilities, the potential of their human resources is unrealized by themselves or by society.

For these same reasons, the costs of racial and residential discrimination and other impediments to human resource development have increased. They were not so large in the traditional society. In our time, the costs of racial and residential discrimination have become so great that they are unbearable.

We have been inclined to assume that those who go to school in rural areas should work in agriculturally oriented occupations. In many instances, therefore, young men and women living in the rural areas have obtained education oriented toward occupations prevailing there. But, as emphasized above, the low rate of increase in the demand for farm commodities, taken in conjunction with the rapidly expanding productive capacity, has kept the increase in return for human resources in farming relatively low. Consequently, the vast technological development in our society has been accompanied by an increase in the premium on preparation for nonfarm employment.

As the value of the human resource has increased and as society has become more mindful of the value of education, it has endeavored to embody the goal of universal education in fact. From time to time, therefore, we have seen modifications in educational organizations to provide greater flexibility and to enable them to meet the diverse needs of the people. This is not a new phenomenon in American education. For example, the Land-Grant colleges and universities were created in the hope that they might make educational services available to the sons and daughters of the farmers and the mechanics. It was believed that this important segment of our population was not benefitting as much as it should from education because the existing institutions were not meeting the needs of the people. In like manner, the Smith-Hughes and Smith-Lever Acts of the early 1900's were passed for the express purpose of providing educational services for elements of society that were deemed to be disadvantaged because of lack of access to educational services.

In spite of this pioneering legislation it has become clear that we are not yet meeting the diverse educational needs of our people. During the 1960's, this nation has probably enacted more significant legislation pertaining to education than in any other decade in its history. For example, the community colleges and technical institutes were developed to provide greater accessibility to education beyond the high school. These institutions have been asked to assume some of the responsibilities that were formerly reserved for the Land-Grant universities. The Vocational Educational Act of 1963 and its Amendments in 1968 attest to the growing recognition that not all persons are interested in attending a college or university and that there is a need for other types of institutions to provide basic vocational skills. The creation of the JOBS Corps and the programs provided under the Manpower Development and Training Act, including the expansion of on-the-job training and migration assistance programs, provide further testimony to the growing realization of the importance of vocational education in our society. We are now searching for still other educational programs to meet the needs of those who are not being served by existing programs.

In summary, I have emphasized that as technology changes and as the educational needs of the people change, our social organizations and institutions also must change. When the needs of some are not met, or when people are placed in programs that do not fully develop their capabilities, both the individuals concerned and society incur losses. Furthermore, the costs to the individuals concerned increase over time. It is our hope and our expectation that the value of the human resource will continue to increase in our society. If this hope is realized, then the costs of failing to develop our human resources through effective educational programs are likely to continue to increase.

Society is now aware of the gains from education and the costs of not providing an education consistent with the capabilities of the people. It is abundantly clear that the nation has made a commitment to provide educational opportunities to all people. It is up to us, those of us in educational work, to devise educational structures that will accommodate the varied needs of the people.

# WHAT WE ARE LOOKING FOR IN OUR EMPLOYEES

Claud F. Lane, Employment and Training Manager
Southern States Cooperative, Inc.

Though I have been working in agriculture and with agriculture in its many phases for many years, this is my first contact with the fine work being done by the Agricultural Policy Institute. When asked by Mr. Hugh Liner to participate in this Conference, I considered it a real honor to be selected. This gives me the opportunity to talk to you, a selected group of educators, concerning what we look for in our manpower needs, and also what may be considered the needs of all agriculture by related businesses.

To set the stage for my topic this morning, it appears to me that you should have a better understanding of "What Is Southern States Cooperative" as an organization relationship with agriculture, levels of opportunity, and manpower philosophy.

Southern States is an organization operating in the states of Virginia, Maryland, Delaware, West Virginia, and Kentucky. It is owned and controlled by farmers, and we, the employees, are employed to manage their business. We employ over 3,000 employees in the many diversified areas of operations in the organization. These diversified areas constitute the following divisions: Retail, Wholesale, Feed, Seed, Fertilizer, Petroleum, General Services, and Finance. Our last year's wholesale volume was approximately $113,000,000, and with our affiliates reaches close to a volume of $200,000,000. Our net worth is $40,000,000. We were organized in 1923 by 150 farmers with three employees and $11,000 capital. Our slogan is "To Make the Business of Farming Pay Better."

We are a farm organization and are related to, and work, as closely as possible, with all farm organizations in our operating territory and some outside this area. We have always attempted to work closely with vocational agricultural teachers, county agents, agricultural colleges, Extension services, Soil Conservation, farmer organizations, and other cooperative associations, such as: Farmers Cooperative Exchange, Central Carolina Farmers, Cotton Producers Association, Tennessee Farmer Cooperative, and Agway. We also work very closely with the Agricultural Colleges Conference Board in the Southeast on feed (dairy, poultry, swine, cattle), seed, and fertilizer. We consider these relationships as an excellent means of being of greater service to farmers.

The level of opportunity in this organization is tremendous. While we are interested every year in securing selected college graduates for our Management-Trainee positions, we are also interested in employing men receiving their associate degrees from two-year colleges, such as the one you have here at North Carolina State University, and also from Community and Junior Colleges and Technical Institutes. We have implemented our recruiting in this area to a great degree in the past three years and are now making progress. These men are employed as Special Trainees and are placed on a formalized six months' training program in our Retail Division. They have the opportunity to advance in the organization to higher level positions, not only in retail, but in the other divisions of the organization, which I mentioned previously. We have been, for some time, interested in employing high school graduates, not only in our retail distribution, but in other areas of this cooperative organization.

This brings me to the point of asking you, as vocational agricultural teachers, and other educators attending this Conference, to place greater emphasis on the counseling with these young people toward careers in agriculture, and especially in an agribusiness career, whether it is in a two-year college or a four-year college. We, and many other agricultural related businesses, have more opportunities than there are graduates from the two educational areas mentioned. Through our association with students in many areas, we find that the career counseling at the high school level has been very limited in orientation toward career opportunities in agriculture, especially in agribusiness, but appears to lean more to careers in glamorous fields, such as; engineering, space research, computer, etc. We do want to say thanks to you on the fine work being done in training young people through FFA, 4-H, and FHA. Some of the most successful people we have in our organization secured their start through this training, in which they learned to manage, organize, speak, work together as a team, and work with people in the community. We still, however, need a better job of counseling.

Not long ago I read a 1958 survey which indicated that there were 15,000 positions for 7,000 agricultural college graduates, but today, there are likely to be 50,000 positions for 7,000 graduates. It is said that 40 percent of the positions available in this country are in agricultural related fields. From these figures, you can see that there is and will be a definite need for men in the agribusiness field, as well as in the other major agricultural areas. In our retail distribution division, of some 200 local points, approximately 70 percent are managed by high school and two-year college graduates. We have high school graduates managing retail locations who are securing volumes of business from a half a million to a million dollars per year. We are always looking for men who are willing to work and willing to grow in our cooperative organization.

Now, as to our manpower philosophy. We are a great believer of promotion from within the organization. With the exception of certain specialized fields, all levels of positions are filled by those who have come up "through the ranks." The General Manager and Assistant General Manager of Southern States have B.S. degrees in Agriculture Education and both have taught vocational agriculture before coming with the organization as Assistant Managers in one of our retail locations. It is our intention to continue this same philosophy in the years ahead. Accordingly, to make this pipeline system work and to have available men to carry out the broad responsibilities of management, we must have an input at the bottom of this pipeline of young men from different levels of education, with potential and the motivation to carry them as high in the organization as their abilities will permit.

With this background information concerning our organization, let's take the subject, "What We Are Looking for in Our Employees," and divide it into two principal areas--personal traits and educational prerequisites. We will discuss each of these separately. I must add that any presentation made on this subject must be general, because my remarks cannot describe every situation involved in the selection of employees for positions within the organization.

The first principal area I would like to discuss briefly is personal traits. These are traits such as character or integrity, truthfulness, loyalty, good personal appearance, self-control, practical intelligence, alertness, friendliness, and there are others. A man with these traits certainly has the foundation on which to build a successful career. Most of these are essential for success in our business, and I think in most businesses in this country.

We started with character or integrity, and this reminded me of a statement in a speech made by our General Manager, Mr. W. T. Steele, Jr., not long ago. He said, "The character and integrity of a man must be beyond question. That the integrity of Southern States Cooperative is its greatest asset." To me, a person with this trait is one who can be counted on to do what he says he is going to do--a person who respects the rights and possessions of others. As you can see, we place character and integrity as the very keystone for all other personal qualifications.

Then, there is good personal appearance. This means an individual being considered for employment may not be handsome, but he doesn't have any abnormal defects and dresses normally and neatly. In other words, he is clean-cut and not "way-out." The employees of any company are its image to the public, and this image must be preserved.

We also desire a man with practical intelligence. The man we are looking for must be intelligent, not only from a grade standpoint, but also should have a high degree of practicality. We might state this otherwise by saying intelligence with common sense. This I can tell you is not easy to find, but most businesses are in need of this trait due to having to deal flexibly with new and changing situations with which we are confronted daily in the business world. Management with us demands fresh, dynamic thinking and wholehearted involvement.

Another personal trait we look for is alertness. We can gain some insight into an individual's alertness during our interview by his answers to questions asked, and by the questions asked by him. Does he grasp the ideas with average ability? Is he quick to understand? Does he talk well and to the point? We also gain some knowledge along this line from his involvement in extracurricular activities while in high school and college. Did he hold any offices? We learn a great deal in this area by talking to his teachers or professors. In working with people continually in our organization, alertness is necessary.

The last of the personal traits I wish to discuss is friendliness. This is a very important trait and is very necessary in our organization where we work with people, where we seek to be of service to people, and where we must talk with people. If there is a lack of friendliness or warmth in a person, it must be developed to aid, in many cases, the further development of an employee. One question which is asked every high school, partial college or college graduate interviewed is, "Do you like working with people?" People want a friendly and pleasing personality.

Naturally, we want all of the personal traits I have mentioned, but we do not attempt to stereotype the individuals we employ. As mentioned earlier, there is a great diversification within our organization, and we need all kinds of people among its many divisions. These traits, however, are the very foundation upon which we build and train men, so that they grow through their ability and proficiency and through their gaining of experience and knowledge, to higher level positions within the organization. I am sure you would agree that most of these personal traits are improved by the growth of an individual in maturity, experience, confidence, and knowledge.

The second principal area for discussion is the educational prerequisites. In this area we feel that the best technical background a man can have for employment with us is to be a generalist rather than a specialist. He, of course, needs a broad general understanding of agriculture and knows the fundamentals of plant life, soil chemistry, animal nutrition, disease control, and marketing. Frequently, much of this can be learned if he has lived on a farm and taken four years of vocational agriculture in high school. We prefer that a man have this broad understanding of agriculture whether he has graduated from high school, two-year college, or a four-year college. Only with rare exception do we need men with highly specialized training in a narrow technical field. When we need a man with specialized training in a narrow technical field, such as a top nutritionist, hybrid corn breeder, etc., we usually employ a man with a doctor's degree in that area. Basic technology, therefore, in a broad sense is what we need in a new man coming with us. Combining this, of course, with a desire to stay abreast of all the many changes taking place in agriculture throughout his entire career with an organization such as ours. To aid our employees in keeping abreast of the changes in agriculture, we have internal training schools arranged and scheduled in commodities, mechanical, merchandising and operations through eight months of each year. We do not have these schools from March through June due to heavy spring business, so that every employee can serve the farmer.

The next area of educational prerequisites for employment with Southern States concerns greater emphasis in the field of business management. I want to congratulate the Directors of Instruction, faculties, and the agricultural colleges of the Land-Grant Universities for developing the agribusiness curriculum. You have incorporated some business management into the regular four-year curriculum. In the past, we found too frequently that a man will come out of college and offer himself for employment without the slightest knowledge of such things as how to read an operating statement, principles of distribution, business finance, business law, principles of advertising, or many other general business subjects that he needs in business or industry. I recognize that in four years of college, you cannot cover all these factors and cover them thoroughly, but it is essential that the individual be given some basic knowledge to aid him in being successful in today's economy. In most instances, the men who move the fastest and are the most successful are those who have some appreciation of general business principles.

In recent years, we have been employing rurally oriented youth who have acquired the necessary background in other ways, who are graduates of business administration and liberal arts from many of the colleges where we recruit. You will note that I have just mentioned that we have been employing rurally oriented young men. In the past we called this farm background, but we are not sure that this will be absolutely necessary in the years ahead. The rurally oriented man is one who knows how to deal with rural people, understands their problems, and recognizes that today's farmer is just as much a businessman as the banker, the merchant, or builder. The boy who has grown up in a rural environment understands and is prepared to serve this type of farmer. Of course, this rurally oriented young man is to be found in other colleges on university campuses, such as business administration or commerce or liberal arts, and we must look to these other areas because there are not enough young men graduating from the agricultural colleges in this country to supply the demand of business and industry. I would again call your attention to the statistics given in the introductory part of my talk today. These showed a lack of agricultural graduates for the tremendous opportunities available for careers.

In considering what we need in our employees, we must say again that we need your aid in counseling your students to enter an agricultural college, and maybe to concentrate on an agribusiness curriculum. I was very interested in a statement by Dr. Paxton Marshall, extension economist at Virginia Polytechnic Institute, in a recent publication. He said, "More and more rural youth must study for off-farm jobs. One farm boy in twelve who will take up farming as a career will more often than not be born into the business. A few will enter farming by the route of matrimony. Youth that enter farming by other routes will not likely earn satisfactory incomes. In rural areas, 177 young men are reaching age 20 for every 100 men who are reaching age 65. That means that 44 percent of the rural males must find work outside the rural area. Preparing these young men for nonfarm work is clearly an important task." I would like to reiterate that last sentence, "Preparing these young men for nonfarm work is clearly an important task." I say to you that the teaching profession in which you are involved has a tremendously important task of preparing rural youth to meet requirements of nonfarm work. I would urge you again to counsel your students to take advantage of just as many business management offerings in their schedule as they possibly can in high school and college. This is an essential aid if they are seeking employment with us or any business related to agriculture.

A third area related to educational prerequisites concerns those needing emphasis in humanities and liberal arts. Here, again, we are talking about educating the generalist rather than the specialist. On numerous occasions, I have seen the highly skilled technical man or the generalist fail because of his inability to communicate his knowledge to other people. We need men who have had some basic training in speech. As an aid to these young people, there are two courses that I have seen in college curricula here at North Carolina State, which are "Fundamentals of Speech" and "Basic Public Speaking." Now it would be my general opinion that there certainly should be a basic speaking course in our high school curriculum. It is never too early to start learning the basic art of proficiency in speaking. Communications between individuals, offices, or divisions in any company are essential to the success of that organization. These are necessary arts to be learned, so that youth can be successful not only in seeking positions in business today, but as an excellent aid in their progress towards a successful career.

Another factor in this area is the need for a better English background. It is depressing, at times, to receive a letter, especially from a college graduate, who is applying for a job, which would not be a credit to an average high school student. I have received a number of these letters in recent weeks. Here are two of them which I will read you, and I don't think you would be any better off than I was in deciding who was accepting employment and who was turning it down:

LETTER I.

Dear Mr. Lane:

I regret accepting your offer for the Management-Trainee position.

I am grateful for finding me qualified for the position.

Yours truly,

LETTER II.

Dear Mr. Lane:

I would like to thank you for your offer to start work with Southern States in their Management-Trainee position, and I accept with great reluctance. I feel that I will enjoy working for Southern States, and will have a great chance to grow right along with it.

Thanks for all the time and information you have given me, and I will look forward to starting the program.

Sincerely yours,

I do know that such a student, when graduated, is no credit to any university regardless of where the blame may lay. He may be highly proficient in other areas, and be extremely deficient in humanities and arts.

Another factor in this area is one that we think is tremendously important, and that is the matter of handling and dealing with people. There is no question that, as a rule, the first major weakness we detect in any employee who comes with us is an inability to effectively deal with people. It is rare that we employ a man who does not have sufficient basic technical knowledge. It is rare that we employ a man who is not physically able to do the job. It is rare that we employ a man who is not able to learn how we do business--it is not for these three reasons normally that we see people be unsuccessful. The most obvious reason for most terminations with us is an inability of a man to understand the importance of getting along with people and working as a member of the team. I am not certain what you, as educators in high schools or universities, can do to assist the man in understanding the importance of learning to work with others. It may be that he needs a course in psychology, sociology, philosophy, or human relations--I do not know. That, I would challenge you to determine. It is essential for success in any organization, almost in any line of endeavor, to learn first of all to get along with people, and second, to learn the matter of handling or management of other people. Some of the very top men in our organization are the men who began, as referred to earlier, as generalists, but who had the knack of motivating, energizing, and leading other people to work together to successfully accomplish an objective. I repeat, I do not know what an individual needs in his education to help improve his skill in this area, but somewhere along the line of educational process, there is some course offering, or individual counseling, which at least, emphasizes the importance of learning how to work with and how to handle people.

These, then, are the basic educational prerequisites we would want in prospective employees. Time has proven to us that these are the things that are essential for success in our type of business. When we see these factors in a man, and no one can see all of them before a man starts to work, we know he will be a success in an organization such as ours.

In closing, I would say that somewhere in the educational process, at all educational levels, we must attempt to instill in young men that success in life demands self-reliance, that success in life comes from one's own initiative and resourcefulness, and success in life is not an automatic formula, which is dished out from a silver platter. I want you to understand that this is not a condemnation of the young men of today. I find that this present generation is by far the most intelligent, communicative, concerned group that I have known; however, the philosophy mentioned needs to be emphasized.

Remember that we, as well as all businesses, want men with imagination, self-confidence, initiative and energy who can learn the important basic factors of management. The early development of management talent is a major concern with us, because the company's steady progress generates a need for "Upper Level" management.

I hope that some of the personal and educational factors I have discussed may be helpful to you in your work with students and an aid to better prepare men for our type of employment as well as the rest of the industry of business. We regard you and your work very highly.

# OCCUPATIONAL TRAINING OPPORTUNITIES FOR RURAL YOUTH

Charles H. Rogers, Research Associate
Center for Occupational Education
North Carolina State University

Since the passage of the Vocational Education Act of 1963, increasing efforts have been made to expand and improve the occupational opportunities for both youth and adults. More recently the 1968 Vocational Education Ammendments have intensified our national goals to make occupational training more relevant and to make it available to all who need it. In order to achieve these national goals, vast changes in programs of occupational education are required. This is ample justification for bringing this group together to examine vocational agriculture in a rapidly changing environment.

The topic we are considering relates to a problem that is much greater than can be solved by vocational agriculture alone. However, it does have tremendous implication for changes which are needed in vocational agriculture. There is no way to escape the fact that when we talk about occupational training opportunities for rural youth, we are speaking in large measure to vocational agriculture, home economics, and office occupation. In 1968 the Advisory Council on Vocational Education in its evaluation report stated that:

> Rural high schools tend to be too small to offer more than agriculture, home economics, and office education. Most of their students will ultimately seek urban jobs but have no preparation for urban life. This deficiency has been particularly serious for rural southern

> Negroes whose resultant plight can be observed in most large cities of the land.[1]

In many rural communities in the South, the only opportunity for a young man to acquire occupational training is through vocational agriculture. Furthermore, it will be a long time yet before comprehensive vocational offerings will be available to all rural youth. Therefore, the group represented here must be concerned with occupational training opportunities for youth reaching beyond narrowly conceived boundaries of vocational agriculture. Any changes that are needed in vocational agriculture must then be considered in light of the broader problem of expanding and improving occupational training opportunities for all rural youth.

In viewing the occupational training opportunities currently available to rural youth and those which are needed, we must first understand the environmental setting in which training is required and the size and nature of the rural population. In recent years America society has been characterized as an urban, industrialized society. Population statistics show that the ratio of urban to rural population has increased to the extent that tin 1964 the urban population constituted 70.9 percent of the total population.[2] What has not be recognized is that the rural population in 1964 was estimated at 55.3 million.[3] The size of the rural population in the United States in 1964 was larger than the entire population of the United States in

---

[1] Subcommittee on Education of the Committee on Labor and Public Welfare, U.S. Senate, Notes and Working Papers Concerning the Administration of Programs Authorized Under Vocational Education Act of 1963, Public Law 88-210, as Amended, (Washington, D. C.: U. S. Government Printing Office, 1968), (Parts of this report were later published as: General Report of the Advisory Council on Vocational Education, Vocational Education: The Bridge Between Man and His Work.), pp. 33-34.

[2] President's National Advisory Council on Rural Poverty, The People Left Behind, (Washington, D. C.: U.S. Government Printing Office, 1967), p. 3.

[3] Ibid.

1880.[4] If this population were constituted as a nation, it would have ranked as the tenth largest nation in the world--a larger population than that of the United Kingdom.[5] This characterization of the rural population is made to demonstrate that, regardless of statistical representations, the population still constitutes an element of such magnitude it must be reckoned with in providing occupational training, particularly for its youth.

Another feature which must be considered is migration of youth from rural to urban areas. In contemporary American society, this migration has been accelerated by the differential fertility rates between rural and urban population and by technological advances in agriculture which have reduced sharply the utilization of manpower in the production of food and fiber. The crux of the problem in recent years has been the migration of unskilled workers from rural sectors to the industrial centers of population. Two factors contribute to the problem of providing occupational training for youth who will migrate; heavy reliance on local taxation for support of education, and the relative autonomy of local schools. These factors mitigate against the development of educational programs designed to prepare persons for occupations located outside the local community. The Advisory Council on Vocational Education recognized this when it stated that "Rural schools have given little attention to the occupational needs of students who migrate to urban centers."[6]

Even though the migration of rural youth to urban centers presents a significant challenge to the education systems in rural areas, the inescapable fact remains that a more serious concern is that of providing adequate occupational training to meet the changing needs of the local labor market. Numberous studies and surveys make it abundantly clear that there is only limited opportunity for rural youth to obtain occupational training for employment available even in their local communities.

---

[4] "Changes in Farm Production and Efficiency," PERB 3, Agricultural Research Service, U. S. Department of Agriculture, June, 1964.

[5] Britanica Book of the Year 1965, (Chicago: Encyclopedia Britanica, Inc., 1965), p. 652.

[6] Committee on Vocational Education, *op. cit.*, p. 6.

In discussing the occupational training opportunities for rural youth, I shall cite the findings of two studies recently completed in the Center for Occupational Education at North Carolina State University. One of the studies was concerned with what happens to the nature of occupational education programs as a community moves from a predominately agrarian economy to an industrial economy. In other words, how are social and economic changes in a community reflected in the occupational training programs available to its citizens? The second study was concerned with the employment problems that teenage school leavers face as they move from school into the local labor market; and to seek some of the causes of these problems which are related to employment structure of the labor market, the school system or the personal characteristics of the teenagers themselves. Specifically, the two studies which I will cite are: (1) "Role of Occupational Education for Areas in Social and Economic Transition," Part 9, Wilson County, North Carolina Community Survey of Education and Manpower,[7] conducted by Dr. C. I. Jones, and (2) "Teenage Unemployment in Two Selected Rural Counties in the South,"[8] which I have just completed.

---

[7] C. I. Jones, "Wilson County Community Survey: Education and Manpower," (Unpublished Research Monograph), Center for Occupational Education, North Carolina State University, Raleigh, North Carolina, 1969.

[8] C. H. Rogers, L. J. Hausman, C. Green, W. R. Parker, and R. D. Artis, "Teenage Unemployment in Two Selected Rural Counties in the South," (Unpublished Research Monograph), Center for Occupational Education, North Carolina State University, Raleigh, North Carolina, 1969.

Both studies point to some real problems faced by rural youth in acquiring appropriate occupational training.

In the Wilson County study which surveyed occupational and educational changes since 1940, a 33.3 percent increase in the total number of jobs in the community was indicated. Table 1 shows that greatest job increases were in operative and kindred workers (+ 166.2 percent); clerical, slaes, and kindred workers (+ 145.1 percent); and service workers (+ 103.8 percent). It was also noted that the categories showing the largest increase in percentage of the total number of jobs were those requiring vocational training.[9]

Looking at the occupational training programs in the public schools, Jones found that no significant change in the vocational offerings had occurred between 1940 and 1967 with the exception of the addition of Introduction to Vocations, an occupational orientation course.[10] Jones further states that:

> In order to cast the relationship of the manpower structure and the educational program into perspective, it appears appropriate to present the historical developments of occupational education offerings in the public schools and the technical institutes, along with the present offerings of these institutions. Table 2 shows the offerings by ten-year intervals beginning with 1940.

**A comparison of these offerings and the developing need for training is suggested in the following hypothesis:**

> The historical development of occupational educational offerings in the public schools and the technical institutes does not appear to

---

[9] C. I. Jones, op. cit., pp. 15-16.

[10] Ibid., p. 21.

Table 1. Occupational Characteristics of the Population 1940, 1950, 1960[a]

| Occupational Description | Number of Jobs by Ten-Year Intervals[b] | | | | | | Change in Jobs | |
|---|---|---|---|---|---|---|---|---|
| | 1940 | Percent Jobs Reported | 1950 | Percent Jobs Reported | 1960 | Percent Jobs Reported | Total Nos., 1940-1960 | Percent Change |
| Professional, Tech. Kindred Workers | 744 | 4.95 | 1107 | 5.86 | 1456 | 7.75 | + 682 | + 91.8 |
| Farmers & Farm Managers | 4465 | 28.56 | 3948 | 20.90 | 2545 | 13.54 | -1920 | - 43.0 |
| Prop., Mgr., Off. (Except farms) | 894 | 5.71 | 1231 | 6.78 | 1292 | 6.87 | + 398 | + 46.7 |
| Clerical, Sales & Kindred | 1255 | 8.02 | 2315 | 12.26 | 3083 | 16.41 | +1828 | +145.1 |
| Craftsman, Foremen, Kindred workers | 832 | 5.32 | 1664 | 8.81 | 2034 | 10.82 | +1202 | + 69.2 |
| Operatives, Kindred Workers | 1067 | 6.82 | 2046 | 10.83 | 2834 | 15.08 | +1767 | +166.2 |
| Domestic Service Workers | 1158 | 7.40 | 938 | 4.96 | 1315 | 7.00 | + 157 | + 13.5 |
| Service Workers (except domestic) | 696 | 4.45 | 993 | 5.25 | 1473 | 7.84 | + 777 | +108.8 |
| Farm Laborers, Farm Foremen | 1569 | 10.03 | 2067 | 10.94 | 1796 | 9.56 | + 227 | + 14.6 |
| Farm Laborers, Unpaid Family workers | 1863 | 11.91 | 1512 | 6.43 | (Not Reported) | | | |
| Laborers, (except Farms) | 869 | 5.55 | 771 | 4.08 | 956 | 5.08 | + 87 | + 10.0 |
| Occupations not Reported | 189 | 1.20 | 239 | 1.26 | (Not Reported) | | | |
| Total | 15,631 | | 18,881 | | 18,784 | | +5205[c] | + 27.7[d] |

Table 1 (continued)

[a] Extracted from: C. I. Jones, "Wilson County Community Survey: Education and Manpower," Center for Occupational Education, North Carolina State University, 1969 (Draft).

[b] U. S. Bureau of Census: 1940, 1950, 1960.

[c] This represents total only for categories reported.

[d] Based on categories reported 1940-1960.

Table 2. Historical Development of Vocational Education in Wilson County[a]

| High Schools | Vocational Courses Taught | | | |
|---|---|---|---|---|
| | 1940 | 1950 | 1960 | 1967 |
| Lee Woodard | Vo-Ag<br>Home Ec. | Vo-Ag<br>Home Ec.<br>Business | Vo-Ag<br>Home Ec.<br>Business | Vo-Ag<br>Home Ec.<br>I.V.-Business |
| Lucama | Vo-Ag<br>Home Ec. | Vo-Ag<br>Home Ec.<br>Business | Vo-Ag<br>Home Ec.<br>Business | Vo-Ag<br>Home Ec.<br>I.V.-Business |
| Rock Ridge | Vo-Ag<br>Home Ec. | Vo-Ag<br>Home Ec.<br>Business | Vo-Ag-Bus.<br>Home Ec.<br>Bricklaying | Vo-Ag<br>Home Ec.<br>I.V.-Business |
| Saratoga Central | Vo-Ag<br>Home Ec. | Vo-Ag<br>Home Ec.<br>Business | Vo-Ag<br>Home Ec.<br>Business | Vo-Ag<br>Home Ec.<br>I.V.-Business |
| Speight | Home Ec. | Home Ec.<br>Vo-Ag<br>Business | Home Ec.<br>Vo-Ag<br>Business | Home Ec.<br>Vo-Ag<br>I.V.-Business |
| Springfield | | Vo-Ag<br>Business | Vo-Ag<br>Business | Vo-Ag<br>Home Ec.<br>I.V.-Business |
| Stantonsburgh | Vo-Ag | Vo-Ag<br>Business | b | b |
| Gardners | Vo-Ag | Vo-Ag<br>Business | b | b |
| Williamson | | Vo-Ag<br>Business | b | b |
| C. H. Darden | | Business | Bricklaying<br>Business | Bricklaying<br>Home Ec.<br>I.V.-Business |
| Fike | | I.C.T.<br>Business | I.C.T.<br>Business | I.C.T.<br>Home Ec.<br>Business |
| Frederick Douglas | | Vo-Ag<br>Business | Vo-Ag<br>Home Ec.<br>Business | Vo-Ag<br>Home Ec.<br>I.V.-Business |
| Elm City | Vo-Ag<br>Home Ec. | Vo-Ag<br>Home Ec.<br>Business | Vo-Ag-Bus.<br>Home Ec.<br>Br. laying 1/2 | Vo-Ag<br>Home Ec.<br>I.V.-Business |
| C. L. Coon | | | | I.V.<br>Business |

[a] Absorbed in Consolidation.

[b] Extracted from: C. I. Jones, "Wilson County Community Survey: Education and Manpower," Center for Occupational Education, North Carolina State University, 1969 (Draft).

> reflect the need for the change demanded by the manpower requirements as the economy has changed from basic agrarian to industrial characteristics.
>
> By 1940 seven of the Wilson County schools had established vocational agriculture as a course. Six were providing home economics education and two were providing some form of business education. By 1950 eleven schools in the county were providing training in vocational agriculture, six were providing home economics education and thirteen were providing business education in some form. In addition, one school had established industrial cooperative training.
>
> By 1960 three schools had been absorbed through consolidation. Of the remaining high schools, eight schools offered vocational agriculture education and eleven schools offered home economics education. Ten schools offered business education. The industrial cooperative training program was continued at the single school in which it was offered in 1950 and one-half unit of bricklaying was offered in another school.[11]

Jones offered the following conclusions about the relationship between occupations and training which have implications for rural youth:[12]

1. Eighty-seven percent of the job positions found within the manpower survey of Wilson County comprise occupational clusters for which vocational-technical education is appropriate.
2. The vocational course offerings at the high school level are appropriate to only 25 percent of job positions within the manpower structure, and such offerings have not changed substantially during the preceding twenty-seven years.

---

[11] Ibid., p. 19.

[12] Ibid., p. 32.

3. The vocational-technical course offerings at the Wilson Technical Institute are appropriate to 16 percent of the job positions within the manpower structure.
4. A relatively high percentage of the students in the public schools do not complete twelve years, thus effectively limiting the amount of vocational training and general education they receive in high school.
5. Twenty-one of the firms in Wilson County provide training for their employees. The net possibly resulting from these training programs is only 16 percent of the job positions in the manpower structure.

If we liberally interpret the data from this study, we find that a combination of the occupational training opportunities in high school, the technical institute and industry provides preparation for slightly more than 50 percent of the job positions in the manpower structure. The study demonstrates graphically that appropriate occupational training opportunities for rural youth are severely limited in terms of the employment opportunities in the community to say nothing of training needed for those who will migrate to urban centers.

The Teenage Unemployment study, conducted in Harnett and Moore counties in North Carolina, had as one of its major objectives the inventory of educational and training opportunities available to rural youth. Another objective was to determine the teenager's perception of the value that occupational training had on his ability to obtain and hold a job. To reach these objectives data were collected from a sample of 345 out-of-school teenage youth, a sample of 116 managers of businesses and industries and the principles of all the public high schools. The following findings of the study are relevant to occupational training opportunities for rural youth.

The school systems in Moore and Harnett counties are rather typical of rural schools systems in South. One county, for instance, has not yet gone through a consolidation movement and still has a large number of small high schools scattered across the country side. Conversely, the other county is just now completing a countywide consolidation plan which will merge all its schools into three for the entire county. At the time of this study only two consolidations were completed. However, we were able to observe some contrast in the type of occupational course offerings in the two different situations. It was evident that the larger consolidated and racially integrated schools afforded a wider range of vocational course offerings than did the smaller predominately white or Negro schools. However, none of the schools surveyed offered the breadth of vocational course offerings necessary to train for job positions indentified in the two-county area.

Out of a total high school enrollment of 6,844 in the two-county area, 5,532 (approximately 81 percent) enrolled in some form of vocational training while in high school. On the surface this percentage appears to be quite impressive; however, examination of the courses in which the students enrolled raises a question about the appropriateness of the occupational training.

Of those enrolled in occupational courses, 56.5 percent were in vocational agriculture or home economics, and an additional 30.5 percent in commercial or office occupations. The remaining 13 percent comprised enrollments in Trades and Industries, Distributive Education, Industrial Arts and Introduction to Vocations.[13] As in Wilson County, there appears to have been little change in the vocational offerings over the past two decades with the exception of the addition of Introduction to Vocations.

To further document the irrevelvancy of their occupational training, the responses of the teenagers sampled who were employed indicated that only 31.6 percent perceived their high school vocational training as useful in obtaining their first job. This was further accentuated among Negro youth. Only 22.5 percent perceived their vocational training as useful. Of the total sample of 344 rural teenagers, 54 had never been employed.[14] Obviously, any vocational training they might have had was of absolutely no value in obtaining a job. Seventy or 20.3 percent of the teenagers had enrolled in education or training programs after leaving school. However, only 13 percent of the Negroes enrolled in post-secondary education as compared to 28.1 percent for whites. This finding leads one to suspect the Negroes either do not see post-secondary occupational education as a means of occupation escalation or they are not being actively recruited by such institutions.[15]

---

[13] Rogers, _et al_., _op_. _cit_., pp. 147-148.

[14] _Ibid_., p. 84.

Each of the respondents who had received post-secondary training was asked if he used the training on his present job. Of the 66 teenagers who responded, 48.5 percent indicated they used the training in their present job. However, only 27.3 percent of the Negroes indicated they were using the training, compared to 59.1 percent of the whites. When teenage males were compared, it was found that none of the Negroes were using the training, compared to 59.1 percent for whites. It would appear from these findings that additional investment in post-secondary training is far more valuable to whites than Negroes. It may also point to possible discrimination in the labor market to the extent that Negroes can find no place to use their added training once it is completed.[16]

When respondents were asked about their desire for more education and training, over 92 percent indicated a desire for additional training. When asked about the type of training they desired, 21.7 percent wanted to complete high school, 11.7 percent college training, 63 percent wanted vocational or technical training and 3.6 percent were uncertain.[17] Obviously, a large majority of rural youth desire an opportunity to pursue additional occupational training.

Reviewing all the findings relative to education and training, it was evident that in all aspects of occupational training, both formal and informal, Negro youth were found to be in a disadvantaged position. In fact, the only area in which there was no difference between Negroes and whites was in the amount of general education. Moreover, Negroes are just as willing as are whites to pursue additional training, but their experience has shown that the opportunities to use additional training, both general and occupational, after they have completed it is much more limited than for whites.[18]

---

[15] Ibid., p. 90.

[16] Ibid., p. 90.

[17] Ibid., p. 93.

Other evidence could be cited which would further point to the inadequacy of occupational training opportunities for rural youth, but it seems unnecessary to belabor the point. I feel that from the two studies cited, the fact of inadequate and inappropriate occupational training for rural youth has been amply documented. A more important aspect of the problem is: "What must we do about it?" The problem of providing appropriate occupational training to rural youth is a challenge to all vocational educators as well as to the citizens of every community.

In closing I would like to reflect on some things that are now being done, and then suggest some things that should be done to increase training opportunities for rural youth. First of all the 1968 Ammendments to the 1963 Vocational Education Act have given much stronger emphasis to providing training to better meet the manpower needs of the states and to make appropriate occupational training available to all population groups. Section 123, which deals with the state plan for vocational education, states that the policies and procedures will assure that:

> (A) due consideration will be given to the results of periodic evaluations of State and local vocational education programs, services, and activities in the light of information regarding current and projected manpower needs and job opportunities, particularly new and emerging needs and opportunities on the local, State and national levels,
> (B) due consideration will be given to the relative vocational education needs of all population groups in all geographic areas and communities in the State, particularly persons with academic, socioeconomic, mental, and physical handicaps that prevent them from succeeding in regular vocational education programs.
> (C) due consideration will be given to the relative ability of particular local educational agencies within the State, particularly those in economically depressed

---

[18] Ibid., p. 103.

> areas and those with high rates of unemployment, to provide the resources necessary to meet the vocational education needs in the areas or communities served by such agencies.[19]

The provisions of this federal legislation lay the ground work for extending training opportunities in rural areas for its youth. Furthermore, funds authorized by this act are earmarked to assure that the stated provisions are met.

As far the states and local communities are concerned, there must be increased effort toward consolidation of small schools. There is no question about the fact that comprehensiveness of occupational training is tied to size of the school. Some relief might be sought in the immediate future by the establishment of additional vocational centers that may be shared by a number of rural schools to provide training for both youth and adults. Further effort must be made to fully integrate the racially separate school systems in the South. Much of the disadvantage that Negro youth experience in occupational training opportunities can be eliminated through the consolidation of Negro and white schools, though the greater problem of their utilization of this opportunity remains to be solved. Greater study of the manpower needs of the community and the occupational plans of rural youth should be made on a continuous basis to serve as a basis for directing and redirecting vocational programs. This will assure greater relevance of occupational training both to the manpower needs and to the collective needs of rural youth.

Another possibility for providing greater occupational training opportunity is to develop vocational curricula in rural schools that provide occupational training for more than one occupation. This is known as the "occupational cluster" concept. Work is now underway in the Center for Occupational Education to develop and test this concept. Dr. Joseph W. Cunningham is currently directing a project to study job commonalities relevant to occupational education. The major objectives of this project are to: (1) develop a conceptual framework for defining common denominator of jobs based on the principles of learning transfer; (2) construct a job analysis instrument based on the conceptual framework to be used in studying job similarities; (3) to try out and validate this instrument. The results of this study, and others like it will be useful in developing vocational curricula for occupational clusters. It appears to me that such curricula have much to offer in extending occupational training opportunities for youth in small rural schools.

---

[19] Public Law 90-576, 90th Congress, H. R. 18366, October 16, 1968, p. 11.

Finally, I would like to look specifically at vocational agriculture and suggest what it can do to increase the occupational training opportunities for rural youth. Let's face it, in a large percentage of rural schools, vocational agriculture is the only avenue that a boy has for any type of occupational training. Therefore, it is incumbent upon agricultural educators to be sensitive to the occupational training needs of these young men and to orient local programs of vocational agriculture to accommodate as many of these needs as possible. A few possibilities come to mind.

1. Develop "modules" of instruction which might serve not only agriculture students but other high school boys aspiring to other occupational pursuits related to the instruction. If we look closely at the vocational agriculture curriculum, we may well find units that could be redeveloped to serve this dual purpose.

2. Consider the possibility of using cooperative work experience programs to extend the training potential of rural schools. This may allow the teacher of agriculture an opportunity to work with local business and industry to provide training stations to agribusiness students and students with occupational interests other than agriculture.

3. Consider the possibility of team teaching with other vocational teachers as well as academic teachers to extend occupational training opportunities. This may be a way to begin implementing a program to teach for occupational "clusters," thus providing training for a wider range of student interests.

These are just a few suggestions which you might consider as you are taking a look at "vocational agriculture in the changing scene." I do not expect that they will all be accepted, but I hope that this analysis of the training opportunities for rural youth will serve as a useful input to the remaining session of this conference.

# CAREER ORIENTATION CONCEPTS APPLIED TO PUBLIC SCHOOL STUDENTS IN RURAL SCHOOLS

Joseph R. Clary, Director
North Carolina Research Coordinating Unit in Occupational Education
North Carolina State University

## Introduction

This paper concerns itself with some of the theoretical bases which can serve to provide a framework for the total program of career development in a school. The concept of career development as used in this paper may be translated into programs and activities ranging from occupational awareness programs at a very elementary level to highly specialized training at professional, technical or managerial levels. It includes the work role, of course, but in addition, takes into consideration the non-work role--even the total "life style" of the worker.

The paper will deal with four major areas: (1) occupational choice theories; (2) occupational choice determinants; (3) self-concept theory; and (4) application of these to programs and activities for students in rural schools.

The need for the development of a theoretical framework for a career development program is founded in the importance of work itself. Originally in America (Venn, 1964) "work" was defined in terms of physical effort, and a man's status was determined by the amount of goods he could produce through physical effort. While work itself is no longer absolutely necessary for subsistence or as a means of gaining status, a man's work occupation is still his single most significant status-conferring role, and whether it is high or low, it allows the individual to form a concept of himself and his position in the community and society as a whole.

According to Norris (1963, p. 4):

> The choice of an occupation is usually one of the most important decisions a person makes in his lifetime. To choose a vocation is actually to choose a way of life. A person spends a large proportion of his waking hours on the job. In fact, many workers spend more time on the job than they do with their families. The average man can expect to work over a period of forty to fifty years. Nor is the time he must devote to it the only way his job will affect him. It can affect his health, physical and mental. It will partially determine his values, and it will influence his manner of speech, his dress, and even his leisure-time activities. It will tend to determine where his family lives, whom they meet, and where his children go to school. In short, it will affect his whole social and economic status.

Hoppock also stressed the importance of the occupational decision (Hoppock, 1967, p. 1):

1. The choice of an occupation may determine whether one will be employed or unemployed.
2. The choice of an occupation may determine success or failure.
3. The choice of an occupation may determine whether one will enjoy or detest his work.
4. The choice of an occupation influences almost every other aspect of life.
5. Occupational choices determine how a democratic society will utilize its manpower.

He suggested also that a person cannot choose what he does not know, and many occupations are unknown to most people. A person might stumble into an appropriate occupation by sheer luck, but to make a wise choice, he requires accurate information about available occupations, their requirements, and their offerings. However, this information alone is not sufficient. A person must also have knowledge and acceptance of his own aptitudes, abilities, needs, limitations, interests, values, feelings, fears, likes, and dislikes and be able to relate the significance of all the facts. Hoppock summarized these ideas in the following way (Hoppock, 1967, p. 4):

> It is obvious that knowledge of occupations can be effectively applied only when one knows something about oneself. It is equally obvious that knowledge of oneself

> can be effectively applied to the choice of an occupation only when one knows something about occupations. Either without the other is incomplete.

Why look at a theoretical base for planning vocational education programs?

Speaking of educational research, Krathwohl (1962, p. 101) said:

> It is true that the fragmentary nature of much educational research can be attributed in part to the inference process, but the failure of research workers to relate their research to a sound theoretical base is also partly responsible. Too much of it is still on the "hunch" or "let's try this and see what happens" basis, without carefully thought through rationale that ties a research study to its theoretical underpinnings and to previous research findings.

The same is also true of much educational program planning. Part of the fragmentary nature of some education programs can be attributed to the lack of a sound theoretical base.

So for the next several minutes, let's examine some of the elements of this theoretical base.

## Occupational Choice Theories

At the present time knowledge about occupational choice is primarily in the form of theories. Therefore, a look at these theories should tell us much of what is known about occupational choice.

In this section various theories on occupational choice are presented under four broad categories developed by Osipow (1968): trait-factor theories; sociological theories; developmental theories, and personality theories.

The term "choice" is used with more than one meaning in these theories. It has been thought of as (1) an act of deciding between one or more alternatives at a point in time, and (2) a process including the events leading up to the point-in-time act and the results of that act.

## Trait-Factor Theories

According to Osipow (1968, p. 10):

> The oldest theoretical approach has been known by a variety of names, most commonly the trait-factor approach. This system assumes that a straightforward matching of an individual's abilities and interests with the world's vocational opportunities can be accomplished, and once accomplished, solves the problems of vocational choice for that individual.

A pioneer of the trait-factor approach was Frank Parsons. Parson's theory is representative of this category (Parsons, 1909, p. 5):

> In the wise choice of a vocation there are three broad factors: (1) a clear understanding of yourself, your aptitudes, abilities, interests, ambitions, resources, limitations, and their causes; (2) a knowledge of the requirements and conditions of success, advantages and disadvantages, compensation, opportunities, and prospects in different lines of work; (3) true reasoning on the relations of these two groups of facts.

A result of the trait-factor approach has been the development of the vocational testing movement. The interest inventories like the Strong Vocational Interest Blank and the Kuder Preference Record and aptitude tests like the Differential Aptitude Test and the Guilford-Zimmerman Aptitude Survey were all developed from the trait-factor point of view. They were developed to aid in the self analysis and counselor analysis steps which Parsons (1909) identified.

## Sociological Theories

It was stated by Osipow (1968, p. 11):

> Other descriptive names for the position have been the reality or accident theory of vocational choice. This approach has as its central point the notion that circumstances beyond the control of the individual contribute significantly to the career choices he makes and that the principal task confronting the youth (or older person for that matter) is the development of techniques to cope effectively with his environment.

Caplow (1954) stated that error and accident often play a larger part in occupational choice than the individual is willing to admit. He further stated that these choices have to be made when the student is still in the schoolroom, very remote from the realities of the world of work. It is then that the student has to decide his courses of study which will eventually lead to an occupation. According to Caplow, realistic choices involve abandoning old aspirations and accepting more limited objectives. Not until late in his career is a man able to sum up his total expectations and compare them to his remaining aspirations to arrive at a sense of frustration, a glow of complacency, or an oscillation between the two.

Miller and Form (1964) stated that a network of interrelated social factors which are associated with occupational levels might be the basis of a social causation theory of career patterns. Relationships exist between the occupational level of a worker and (1) the father's occupation, (2) the historical circumstances, (3) the father's income and education, (4) financial aid and influential contacts, and (5) social and economic conditions. Although they conceded that personal motivation and native ability are necessary components of occupational mobility, they said that social background is the crucial determinant. Social background, native ability, historical circumstance, and acquired personality traits are all forces intertwined which pull with different intensities upon the worker at different times in his career. According to them, the forces often become equalized by the time the person is 30 to 40 years old.

## Developmental Theories

Osipow (1968, p. 11) summarizes the approach taken by developmental theorists as follows:

> The approach holds as its central theses that (1) individuals develop more clearly defined self-concepts as they grow older, although these vary to conform with the changes in one's view of reality as correlated with aging; (2) people develop images of the occupational world which they compare

> with their self-image in trying to make career decisions; and (3) the adequacy of the eventual career decision is based on the similarity between an individual's self-concept and the vocational concept of the career he eventually chooses.

Today no one doubts the developmental qualities of vocational behavior, but from about 1900 to 1950 vocational choice was considered a point-in-time event. The interests, tasks, determinants and stages of development leading to this choice and the results of the choice had not been considered. Beginning in about 1950, the developmental aspects of vocational behavior began to take on importance.

Ginzberg and his associates (1951) were the first to formally present this approach through their monograph, *Occupational Choice*. Later Ginzberg explained the theory more fully when he wrote (Peters and Hansen, 1966, pp. 95-96):

> The basic elements in the theory which we developed were three: *occupational choice is a process, the process is largely irreversible, compromise is an essential aspect of every choice*. Concerning the first element, it can be said that the process begins at the birth of the individual and may remain open until death. We began the study of the process in individuals at about the age of eleven, which appeared to be the first time that a young person recognizes that he will eventually have to do something about choosing his future work. We found that the process of occupational decision-making could be analyzed in terms of three periods--*fantasy* choices (before 11); *tentative* choices (between 11 and 17); and *realistic* choices (between 17 and young adulthood when a person finally determines his choice). The child, in the fantasy period, believes that he can become whatever he wants to become. He makes an arbitrary translation of his impulses and needs into an occupational choice. During the tentative period, his translation is almost exclusively in terms of such subjective factors as his interests, capacities, and values. Adolescents consider their choices tentative because they sense that they have not effectively incorporated the reality factors into their considerations. They are able to do this during the realistic period when they seek to work out a compromise between their interests, capacities, and values, and the opportunities and limitations of the environment.

> We discerned four stages within the tentative period and three stages within the period of realistic choices. The first stage in the tentative period was called the interests stage because tentative choices made at this time are based almost exclusively on interests. Next the adolescent takes into consideration his capacities, and later, his values--the next two stages--and around seventeen he is in the transition stage, looking forward to college or a job. The realistic period begins with the exploration stage during which the individual seeks for the last time to acquaint himself with his alternatives. This is followed by the crystallization stage, when he determines his choice, and finally, by the specification stage, during when he delimits it.

After critically analyzing Ginzberg's theory, Super set out to present a more adequate theory of vocational development, using the term "development," rather than "choice," because it better included all concepts of preference, choice, entry, and adjustment. First, he gave the twelve elements he believed make up an adequate theory of vocational development (Super, 1953, pp. 187-189):

> Individual Differences -- . . . It is surely unnecessary to document the fact of individual differences in these differences for vocational development.
>
> Multipotentiality -- . . . It is well-established fact and a basic assumption of vocational counseling that each person has the potential for success and satisfaction in a number of occupations.
>
> Occupational Ability Patterns -- . . . The theory of the patterning of aptitudes and interests within individuals and within occupational families and the significance of this patterning for choice, entry, and adjustment are widely accepted and applied by counselors and psychologists today.
>
> Identification and the Role of Models -- (research provides) . . . some subjective basis for the theory that the childhood and adolescent identifications play a part in shaping vocational interests, and also provide role models which facilitate the development and implementation of a self-concept, provided that the required abilities and opportunities are present.

Continuity of Adjustment -- . . . These formulations (the fact that adolescents and adults face a succession of emerging problems as they go through life, and that some of these problems are peculiar to the various life stages,) are drawn on again . . . as an explanation of the process of compromise between self and reality.

Life Stages -- . . . the general theory of life stages (exploratory, establishment, maintenance, and decline) is basic to vocational guidance and will be drawn on heavily in my attempt at synthesis.

Career Patterns -- . . . Career pattern theory appears to be a key element in the theoretical basis of vocational guidance, for it gives the counselor basic assumptions concerning the social, educational, and occupational mobility of his counselees, and it enables him to foresee types of problems which a given client is likely to encounter in establishing a career.

Development Can Be Guided -- . . . Although there is ample evidence that ability is to some extent inherited, and that personality too has its roots in inherited neural and endocrine makeup, there is also good evidence that manifested aptitudes and functioning personality are the result of the interaction of the organism and the environment. It is a basic theory of guidance as we know it today that the development of the individual can be aided and guided by the provision of adequate opportunities for the utilization of aptitudes and for the development of interests and personality traits.

Development, the Result of Interaction -- That the nature of the interaction between the individual and his environment is by no means simple has been brought out by a variety of investigations . . .

The Dynamics of Career Patterns -- The interaction of the individual and his environment during the growth and early exploratory stages, little understood though the process actually is, has been much more adequately investigated than has this same process during the late exploratory, establishment, and maintenance stages.

Job Satisfaction: Individual Differences, Status and Role -- . . . They (research findings) can all be included in a comprehensive theory of job satisfaction or work adjustment. This is the theory that satisfaction in one's work and on one's job depends on the extent to which the work, the job, and the way of life that goes with them, enable one to play the kind of role that one wants to

> play. It is, again, the theory that vocational development is the development of a self concept, and that the degree of satisfaction attained is proportionate to the degree to which the self concept has been implemented.
>
> Work is a Way of Life -- . . . This is the theory that work is a way of life, and that adequate vocational and personal adjustment are most likely to result when both the nature of the work itself and the way of life that goes with it (this is, the kind of community, home, leisure-time activities, friends, etc.) are congenial to the aptitudes, interests, and values of the person in question. In the estimation of many, this is a basic element in a theory of vocational development.

After mentioning these different elements of a theory of vocational development and citing sources in the literature where further explanation of each one might be found, Super then organized these elements into a comprehensive theory comprised of these ten propositions (Super, 1953, pp. 189-190):

1. People differ in their abilities, interests and personalities.
2. They are qualified, by virtue of these characteristics, each for a number of occupations.
3. Each of these occupations requires a characteristic pattern of abilities, interests and personality traits, with tolerances wide enough, however, to allow both some variety of occupations for each individual and some variety of individuals in each occupation.
4. Vocational preferences and competencies, the situations in which people live and work, and hence their self concepts, change with time and experience (although self concepts are generally fairly stable from late adolescence until late maturity) making choice and adjustment a continuous process.
5. This process may be summed up in a series of life stages characterized as those of growth, exploration, establishment, maintenance and decline, and these stages may in turn be subdivided into (a) the fantasy, tentative, and realistic phases of the exploratory stage, and (b) the trial and stable phases of the establishment stage.

6. The nature of the career pattern (that is, the occupational level attained and the sequence, frequency, and duration of trial and stable jobs) is determined by the individual's parental socioeconomic level, mental ability, and personality characteristics, and by the opportunities to which he is exposed.
7. Development through the life stages can be guided, partly by facilitating the process of maturation of abilities and interests and partly by aiding in reality testing and in the development of the self concept.
8. The process of vocational development is essentially that of developing and implementing a self concept: it is a compromise process in which the self concept is a product of the interaction of inherited aptitudes, neural and endocrine make-up, opportunity to play various roles, and evaluations of the extent to which the results of role playing meet with the approval of superiors and fellows.
9. The process of compromise between individual and social factors, between self concept and reality, is one of role playing, whether the role is played in fantasy, in the counseling interview, or in real life activities such as school classes, clubs, part-time work, and entry jobs.
10. Work satisfactions and life satisfactions depend upon the extent to which the individual finds adequate outlets for his abilities, interests, personality traits, and values; they depend upon his establishment in a type of work, a work situation, and a way of life in which he can play the kind of role which his growth and exploratory experiences have led him to consider congenial and appropriate.

Super was probably the most prolific writer in the area of self-concept and developmental theory. However, a number of others have worked with these concepts.

Personality Theories

Describing the approach taken by personality theorists, Osipow (1968, pp. 11-12) wrote:

> The general hypothesis underlying these studies is that workers select their jobs because they see potential for the satisfaction of their needs. A corollary hypothesis

> is that exposure to a job gradually modifies the personality characteristics of the worker so that, for example, accountants eventually become like one another if indeed they were not similar in personality to begin with.

Anne Roe has been one of the leaders among the "personality theorists" and has suggested a number of hypotheses (Roe, 1957, pp. 212-213) about the relationships between early experience and attitudes, abilities, interests, and other personality factors which affect the ultimate vocational selection of the individual.

This first portion of Roe's theory concerned itself with the genetic base of abilities and interests related to occupational choice and the need-satisfaction hierarchy through which they operate. The second part concerned itself with the parent-child relationship in early childhood which generates needs, attitudes and interests that will be expressed in later life through actions such as occupational choice. She classified occupations on the basis of activity and level, and related parental handling of the child to the types of occupations. The activity and level classification was (Roe, 1957, p. 217):

| Groups | Levels |
|---|---|
| I. Service | 1. Professional and managerial 1 |
| II. Business Contact | 2. Professional and managerial 2 |
| III. Organizations | 3. Semiprofessional, small business |
| IV. Technology | 4. Skilled |
| V. Outdoor | 5. Unskilled |
| VI. Science | |
| VII. General Cultural | |
| VIII. Arts and Entertainment | |

She developed a schematic presentation which showed generally that a warm relationship with parents resulted in orientation toward persons and the choice of occupations in groups I, II, III, VII, and VIII. A cold relationship with parents resulted in more of an orientation away from persons and choice of occupations in groups IV, V, and VI. According to Roe, the level of occupation is determined primarily by the need intensity, limited by the socioeconomic background and intelligence.

Also well known among the personality theories is Holland's (1959) explanation of occupational choice as interaction of individuals' personality patterns and environmental characteristics. He stated that at the time of vocational choice each person has a set of adjustive orientations.

According to Holland, the adjustive orientations, motoric, intellectual, supportive, conforming, persuasive, and esthetic, each represent a distinctive life style. This life style is characterized by preferred methods of dealing with daily problems and includes variables like values and interests, preferences for certain roles and dislike for others, interpersonal skills and other personal factors. People search for environments and occupations that fit their life styles. Their behavior can be explained by the interaction between their personality and environment.

Hoppock's (1967) Composite Theory, although listed under personality theories by Osipow (1968), more nearly approaches a synthesis of theories (Hoppock, 1967, pp. 111-114):

1. Occupations are chosen to meet needs.
2. The occupation that we choose is the one that we believe will best meet the needs that most concern us.
3. Needs may be intellectually perceived, or they may be only vaguely felt as attractions which draw us in certain directions. In either case, they may influence choices.
4. Vocational development begins when we first become aware that an occupation can help to meet our needs.
5. Vocational development progresses and occupational choice improves as we become better able to anticipate how well a prospective occupation will meet our needs. Our capacity thus to anticipate depends upon our knowledge of ourselves, our knowledge of occupations, and our ability to think clearly.
6. Information about ourselves affects occupational choice by helping us to recognize what we want and by helping us to anticipate whether or not we will be successful in collecting what the contemplated occupation offers to us.

7. Information about occupations affects occupational choice by helping us discover the occupations that may meet our needs and by helping us to anticipate how well satisfied we may hope to be in one occupation as compared with another.
8. Job satisfaction depends upon the extent to which the job that we hold meets the needs that we feel it should meet. The degree of satisfaction is determined by the ratio between what we have and what we want.
9. Satisfaction can result from a job which meets our needs today or from a job which promises to meet them in the future.
10. Occupational choice is always subject to change when we believe that a change will better meet our needs.

## Summary of Key Concepts or Common Denominators in Occupational Choice Theories

Now, let us take a minute to select from the theories some of the key concepts or common denominators that keep reoccurring. These can serve as a framework or explanation for what happens when an individual chooses a vocation. We cannot look at these as definite principles which have withstood the rigorous test of research. We should look at them as guides which have been given careful analysis.

Norris, Zeran and Hatch (1966), have done a good job in summarizing these common denominators:

1. Occupational choices are the direct results of counselee needs.
2. The counselee's needs parallel the developmental processes of the individual.
3. Needs may or may not be expressed or recognized by the counselee.
4. Choice is a process which extends over a period of years from elementary school to young adulthood.
5. Decisions, although tentative, are related to prior experiences. Such decisions have an impact on the future to the extent that many become irreversible.

6. The career pattern is influenced by many factors, such as parental socioeconomic level, mental ability, personality characteristics, and the opportunities to which the individual is exposed.
7. The development of a realistic self-concept in relation to occupational opportunity is imperative to realistic choice.
8. The process is a series of compromises between goals and opportunities.
9. Occupational choice is subject to change as the recognized needs and the opportunities undergo significant changes.
10. The process is continuous and affected by many planned as well as incidental experiences.

## Occupational Choice Determinants

This section has been designed to show another aspect of occupational choice theory. Consideration of determinants of occupational choice disregards the time element which was important to most of the occupational choice theories. The intent here is to present some of the factors which determine or at least influence choice. Kaldor and Zytowski (1969) suggest three basic determinants of occupational choice: (1) the chooser's occupational utility functions (preference system); (2) the resources or inputs at the disposal of the individual; and (3) the anticipated consequences of employing given resources in various occupations which have differing potential for gratification. The strategy hopefully to be employed in the resolution of choice is maximization of net gain. Zytowski (1968) also suggests some social determinants of occupational choice.

The concept of choice requires some alternatives and a criterion for making the selection. The alternatives are the different kinds of work or occupational opportunities. There are four different sets of opportunities which can be specified: (1) all the jobs that exist; (2) all those for which a person could satisfy the entrance requirements; (3) those about which the person has knowledge; and, since the process of choice-making is not costless, (4) those to which he will give serious consideration in order to economize his decision-making resources.

### The Chooser's Preference System

The consequences of an occupational choice for an individual are assessed by him in terms of his value system. The extent to which he gets the outputs he wants constitutes the level of occupational utility or, as psychologists would term it, "job satisfaction." This "occupational utility" or "job satisfaction" is a function of a set of variables which a person believes to be relevant to his choice. These might include such things as level of beginning earnings, rate of increase of earnings over time, stability of earnings, amount of physical activity, amount of mental activity, fringe benefits, geographic region, etc.

We cannot and should not expect each person to come out with the same choice because one person may value one of the variables or a combination of the variables differently than another person would value them. We are here assuming that a person can evaluate the consequences of choosing between various occupational alternatives. This is a somewhat risky assumption because the chooser (especially at the secondary school level) may have little knowledge of the relationship of means to ends.

### Resources or Inputs and Occupational Opportunities

What are the resources that the individual brings to the situation which influences his choice? Some of these include skills and abilities, personality characteristics, financial worth, borrowing capacity, or perhaps family financial state. Some of these may be increased by further investment. For example, some of the individual's financial resources, time and energy may be used to secure additional knowledge or skills. Some of the resources may be needed for investment in tools and equipment. The resources brought to the situation and the amount and form of investment required will influence the choices made.

Occupational entrance requirements appear to be an external constraint on the person's occupational opportunities to which he must adapt if he maximizes his job satisfaction.

## Anticipated Consequences

Different occupations afford widely differing opportunities for "job satisfaction." Kaldor and Zytowski (1969) illustrate this point as follows:

> For example, teaching may give a high level of occupational status and a low level of initial earnings. Bricklaying, on the other hand, may give a moderate level of status and a moderate level of initial earnings. Or farming may provide a high level of autonomy and a low level of earnings stability, whereas clerical work may offer a high level of earning stability and a low level of autonomy.

Individuals may not get their anticipated consequences because of error in information about the occupations or because of error in its interpretation. Differences in information may also influence the range of occupational possibilities which will be considered by a person. Further differences may result from the attachment of different uncertainties to expectations or because of differences in unwillingness to operate under uncertainty.

## Social Determinants

In another work Zytowski (1968) pointed out that there are social determinants of occupations. He mentioned that the father's occupation many times helped determine the son's choice, although sometimes the son tried to better his father's occupation. He also mentioned other social determinants such as effects of religion, race, sex, and the health of the economy, or change in its composition along with its affects on the availability of various occupations.

## Self-Concept Theory and Vocational Exploratory Behavior

A number of persons have been involved in self-concept theory. In our discussion today, I will limit myself to a very sketchy outline of some work by Dr. Donald E. Super (1963).

Dr. Super defines a self-concept as the individual's picture of himself and suggests that each person has a number of self-concepts. For example he has a vocational self-concept (those self-concepts which the individual considers vocationally relevant).

The self-concept system is made up of the various simple self-concepts, the pictures which the individual has of himself, in different roles and in different types of situations.

Self-concepts must be assessed by some method of self report. An interest inventory (such as the Kuder Preference Record or the Ohio Vocational Interest Survey) would seem to be one way to assess these. Most interest inventories, however, only indicate whether one's simple self-concepts resemble those of persons in some norm group--they do not tell whether the person sees himself in the role of bricklayer, or engineer, or farmer, or vocational agriculture teacher.

Let us turn now to a brief discussion of exploratory behavior and of vocational exploratory behavior.

### Exploratory Behavior

What makes an act exploratory? The essential elements are search, experimentation, investigation, trial, and hypothesis testing. (While some of these involve information seeking, not all of them do.)

Most exploratory acts have their origin in situations in which the individual is confronted with or experiences a problem, need, want or lack--it is essentially problem-solving behavior.

Some situations giving rise to exploratory behavior include the following:

1. Uncertainty about the wisdom or practicality of a contemplated plan, decision, choice or act.

2. Awareness of the need for more information about one's self or one's environment.
3. Uncertainty about what is expected of one (as worker, adolescent, student, etc.), that is, uncertainty about role requirements.
4. Feeling the lack of an adequate basis for choice, decision-making or planning.
5. A perplexing question or vaguely understood situation to which a response must be made.
6. Choice anxiety; uncertainty about which of several alternatives to choose.
7. Feeling the need for a plan to achieve some purpose or goal.
8. *Boredom, monotony, restlessness, need for diversion.*
9. Desire for thrills, risks, stimulation.
10. Feeling the need for an explanation or becoming aware of a gap in one's information.
11. A situation in which one's customary or habitual modes of response prove inadequate.
12. Desire for change, variety, novelty.
13. Desire to emulate an admired person or group of persons.
14. Need to confirm a belief, hunch, hypothesis, or expectation about oneself or some aspect of one's environment.
15. Desire to meet or live up to the expectations and standards of significant others.
16. Vague feelings of apprehensiveness or anxiety resulting in a desire to see if, or to reassure oneself that, there is nothing to be afraid of.
17. The demand, self or other-imposed, that one be well-informed, knowledgeable, planful, logical.
18. Awareness of a discrepancy between the way one perceives some aspect of the environment and the way others perceive it.
19. Conflicting self-perceptions and self-evaluation.

## Vocational Exploratory Behavior

According to Super, vocational exploratory behavior refers to activities, mental or physical, undertaken with the more or less conscious purpose or hope of eliciting information about oneself or one's environment, or of verifying or arriving at a basis for a conclusion or hypothesis which will aid one in choosing, preparing for, entering, adjusting to, or progressing in, an occupation.

The definition above assumes that exploratory behavior is capable of producing changes in a person's knowledge, behavior, attitudes, and perceptions.

Some of the possible outcomes of such vocational exploratory behavior include:

1. Increased self knowledge:
    - a. more realistic appraisal of his interests, abilities, values, and personality traits
    - b. more realistic appraisal of his strengths and shortcomings
    - c. increased understanding of why he behaves, feels, and thinks as he does
    - d. greater awareness of how he resembles, or differs from, others
2. Increased ability to relate this new knowledge to future objectives.
3. Increased and more specific knowledge of:
    - a. occupational possibilities, their availability, character, requirements
    - b. expectations of persons who occupy a significant place in his life; parents, friends, peer group, teachers, employer, etc.
    - c. adult mores and expectations
    - d. obstacles he may have to overcome to achieve his objective
    - e. his preferred occupation
4. Changes in the way he perceives himself:
    - a. a more realistic self concept
    - b. a clearer and better differentiated self concept
    - c. a more integrated self concept
    - d. an expanded self concept
    - e. greater confidence in his self concept
    - f. a clearer sense of identity

5. Changes in his interest, values, goals, concepts of success.
6. Decision to continue with or abandon a course of study, preference occupation, or course of action.
7. Changes in the way in which he handles his problems or his relationships with people.
8. Greater awareness of the ways in which people and occupations resemble or differ from one another.
9. Greater differentiation of interests and abilities.
10. Seeing significance in something which previously had little or different meaning to him.
11. Change to a vocational or education objective which is more in line with his interest, abilities, values, personality, self concept, and financial means.
12. Clearer understanding of the bases on which certain decisions which are confronting him should be made.
13. Confirmation or rejection of a previously held belief about himself, others, or some aspects of his environment.
14. Increased awareness of the choices and decisions which are, or will shortly be, confronting him.
15. Formulation, implementation, or both, of plans for attaining his objectives, or for self-development.
16. Formulation and implementation of plans for further exploration.
17. Clearer formulation of objectives.
18. Increased confidence in, or commitment to, his objectives.
19. More realistic plans for achieving the goals he has set for himself.
20. More specific plans for achieving his objectives.

## Application to Students in Rural Schools

We must now turn to the question of application of these career orientation concepts to public school students in rural schools. A number of possibilities come to mind. These will be outlined only briefly.

1. Curriculum Blending. Efforts should be made by all teachers in the school, whether at the elementary, middle, or high school level to use examples, illustrations, and problems representing a cross section of occupations. These should not be limited to the local community but be representative of occupations in the geographical region or state.

2. Guidance and Counseling Programs. Students in rural schools need strong and continuous guidance and counseling programs. During the early school years, group guidance sessions on career development might be organized. The guidance counselor, regular teacher, or a qualified outside person may conduct these sessions.

During the middle school years, group occupational guidance may be organized as special group guidance sessions, as special units, or even as occupational orientation courses. A special teacher may be used to provide the instruction.

At the upper school level occupational orientation courses and/or special scheduled sessions may provide the most effective and efficient method for providing group occupational guidance. Students should be heavily involved in the planning sessions for these.

3. Individual Counseling. Individual counseling services should be available for students at all levels for personal, educational and occupational counseling. As the individual is confronted with the development and/or implementation of a self-concept, as he moves from one phase or stage to another in the vocational development process, as he tries to determine the relationship of his own preference system to occupational opportunities, as he considers his available resources and the anticipated consequences of employing these resources in various occupational opportunities, he needs the availability of a professionally competent counselor.

4. Occupational Competence Development Courses. Specific occupations to be taught in occupational competence development courses should be determined by a survey of the community and surrounding

areas to determine what occupations will be available to students completing the courses. The occupations taught should be based on the availability of those occupations to the students. A comprehensive and diversified program of occupational competence development courses should be offered in rural schools.

The development and utilization of occupational advisory committees is recommended. These committees should be made up of community leaders in the different occupational areas available in the community and in the surrounding areas to which students might migrate to work. The ideas and advice available through these committees should be used for the development and operation of the competence development courses.

Organization of the courses under an occupational education department is recommended. This will allow ease of movement within and between occupational areas for the student, and will further facilitate exploration of different occupations.

Occupational competence development may be taught as occupational units in the early school years and consist primarily of experimentation and exploration with simple tools and simple occupational skills.

In the middle school years exploration should be continued with more basic tools and skills. Some supervised occupational experience should be offered to provide exploratory experiences.

In the later school years the exploration approach is still recommended for some students, while others should work with specialized equipment and skills toward development of entry level competence for specific occupations. The cooperative occupation work experience should be implemented to provide learning by doing in the actual situation and reality testing. The same approach is recommended for the advanced school years with more advanced equipment and skills. Competence for the entry level should be the objective for some courses, while competence past entry level and retraining for workers already on the job should be included for others.

5. Placement and Follow-Up. Placement and follow-up services should be provided for every student leaving school for the world of work. Each student should be given assistance, if desired, in finding the first job. He should be followed for a period of five years or more and provided the opportunity for replacement on different jobs, reentry into school, and participation in group occupational guidance and individual counseling.

Primary responsibility for placement and follow-up may be divided between the counselors and the occupational instructors. The instructors might be more effective with certain students than the counselors, and the counselors might be able to work better with others. By working together, both should accomplish the task in most instances better than either could alone.

## Some Implications for Vocational Agriculture

Agricultural education should begin at the elementary school level using a blended curriculum approach designed to develop an awareness of agricultural occupations by the students. Special units or activities may be developed. The vocational agriculture teacher should be used as a resource person.

In group guidance sessions or units at the middle school or high school level, the vocational agriculture teacher may be involved in the planning and/or actual conduct of some of the sessions.

In schools where occupational orientation courses are offered, orientation to agricultural occupations should be included. The vocational agriculture teacher should be actively involved in planning the orientation program and in providing opportunities for exploratory experiences for the students.

Vocational agriculture programs should reflect what is known about career choice and career development. The first year program should be designed to develop an awareness of and orient students to the broad range of agricultural occupations. Exploratory experiences should be developed. Rather heavy attrition from the vocational agriculture program after the first year should be considered normal. Attrition rates at upper levels should decrease each year but some is normal at each level. Vocational agriculture course offerings should become more specialized with increasing grade levels. Cooperative training programs in agriculture should be developed for certain students.

A strong placement service should be provided by the school. Perhaps this can best be done through a cooperative approach by the guidance counselor and the vocational agriculture teacher. Responsibility for placement of each student should be assumed. This placement may be in a post-secondary educational institution, the armed service, or in an agricultural occupation.

Training and retraining in agricultural occupations should be provided for out-of-school youth and adults. Counseling programs for these youth and adults should also be provided.

A follow-up of former enrollees should be conducted annually for the purpose of program evaluation and revision and for assisting former enrollees in the development of continuing education plans.

In the implementation of such a program it would seem to make sense that anytime you need one agriculture teacher in a school, you need two.

# LIST OF REFERENCES

Caplow, T. 1954. The Sociology of Work. University of Minnesota Press, Minneapolis.

Ginzberg, E. J., W. Ginsberg, S. Axelrad and J. L. Herma. 1951. Occupational Choice. Columbia University Press, New York.

Holland, J. L. 1959. A theory of vocational choice. Journal of Counseling Psychology 6:39-45.

Hoppock, R. 1967. Occupational Information. McGraw Hill, Inc., New York.

Kaldor, D. R. and D. G. Zytowski. 1969. A maximizing model of occupational decision-making. Personnel and Guidance Journal 47:781-788.

Krathwohl, D. R. 1962. The scope of the research problem. Theory into Practice 1(2):101.

Miller, D. C. and W. H. Form. 1951. Industrial Sociology. Harper and Bros., New York.

Norris, W. 1963. Occupational Information in the Elementary School. Science Research Associates, Inc., Chicago.

Norris, W., F. R. Zeran and R. N. Hatch. 1966. The Information Service in Guidance. Rand McNally & Company, Chicago.

Osipow, S. H. 1968. Theories of Career Development. Meredith Corp., New York.

Parsons, F. 1909. Choosing a Vocation. Houghton Mifflin Co., New York.

Peters, H. J. and J. C. Hansen (ed.). 1966. Vocational Guidance and Career Development. The Macmillan Co., New York.

Roe, A. 1957. Early determinants of vocational choice. Journal of Counseling Psychology 4:212-217.

Super, D. E. 1953. A theory of vocational development. American Psychologist 8:185-190.

Super, D. E., *et al*. 1963. Career Development: Self-Concept Theory. College Entrance Examination Board, New York.

Venn, G. 1964. Man, Education, and Work. American Council on Education, Washington, D. C.

Zytowski, D. G. 1968. Vocational Behavior. Holt, Rinehart and Winston, Inc., New York.

# POSSIBILITIES OF EXEMPLARY PROGRAMS IN VOCATIONAL EDUCATION: IMPLICATIONS FOR VOCATIONAL AGRICULTURE

C. Virginia Bert
Consultant, Florida Research Coordination Unit for
Vocational Education, Florida Department of Education

## Introduction

Basing the Vocational Education Amendments of 1968 upon recommendations evolving from an evaluation of the 1963 Act achievement, Congress has challenged vocational educators to meet increasing labor market demands for skilled workers and to develop new and expanded programs designed to meet the occupational needs of individuals, particularly the disadvantaged and handicapped. While providing for the continuation of current programs, the legislation encompasses new areas of emphasis. Several innovations in vocational-technical education are evident in the various titles of the 1968 Act.

One includes emphasis upon the development of long-range and annual state and local program planning and evaluation.

Another change provides for greater services to the physically and mentally handicapped apart from the socioeconomically and educationally disadvantaged. This major emphasis throughout the Act is a challenge to vocational educators to extend the range of service to these two groups.

A third major emphasis in the 1968 Amendments is upon post-secondary vocational education. These programs are designed to continue the occupational education of persons who have completed or who have left high school.

The 1968 Amendments emphasize consumer and homemaking education programs. Consumer education and preparation for the role of homemaker are identified for intensive development to improve home environments and the quality of family life in economically depressed areas and areas with high rates of unemployment.

Cooperative vocational education programs, particularly for disadvantaged persons, are charged with providing meaningful work experience combined with classroom activities to enable students to acquire knowledge, skills, and appropriate work attitudes. Work-study programs are planned to continue providing assistance for economically deprived vocational education students.

Other areas of emphasis in the Act provide for the construction and operation of residential vocational schools, curriculum development in vocational and technical education, vocational education leadership and professional development programs, and ancillary services to improve program quality.

Several programs which are broadened in the Vocational Amendments of 1968 include: (1) remedial vocational or technical instruction incident to regular programs, (2) training programs designed to prepare individuals for subprofessional work in new and emerging occupations, (3) training for teachers to meet the special needs of handicapped students, (4) leadership development awards to provide for preparation of professional personnel, (5) preservice and inservice institutes to improve the quality of instruction, supervision and administration of vocational education, and (6) cooperative activities with other governmental agencies to match people and jobs.

The development of exemplary programs to bridge the gap between learning and earning is another innovation. Projects are designed to acquaint individuals or groups of students at an early age with the broad range of occupations, or to provide intensive guidance and counseling for students during the last years of schooling and initial job placement. Other exemplary programs include work internship experience during the school year or summer; exchanges of personnel between schools and business and industry; released time for workers to continue their education and programs designed to broaden curricula and to recruit potential vocational educators.

## Guidelines

In order to implement the innovative activities outlined in the new Act, it will be necessary to develop exemplary programs and projects. Guidelines for the development of projects have been prepared and adopted for use by educational agencies in Florida.

The process of guideline development began with definition of the terms innovation and exemplary. Innovation is defined as a deliberate, specific, planned change to achieve an outcome which is believed to be more effective in accomplishing the goals of a system. Innovation in education is the alteration of structures or processes of the system to achieve a higher level of goal attainment.

Innovation may consist of a unique organization of human and material resources, the introduction of a new element, or recombination of existing elements. Innovations may be relatively simple and restricted in their effects, or they may be so sweeping that they ultimately affect all aspects of instruction, administration, student services, physical plant, and equipment.

For the purposes of identifying innovative projects for potential funding support, the proposed project must:

1. Modify a situation by:
    a. Introducing totally new ideas or practices
    b. Adapting rarely used ideas or practices
    c. Combining new and rarely used ideas or practices or using conventional ideas and practices in new ways
2. Be applicable to one or more aspects of program operation or administration

3. Have a potential for improving all or part of the state program of vocational, technical and adult general education
4. Not be a conventional program or practice in a new location

Exemplary programs are those effective vocational and vocationally related activities which are planned, established, and operated for the purpose of demonstrating new methods, techniques, and services of significant value in improving programs of occupational education. Exemplary programs have highly desirable outcomes which are not usually achieved in existing vocational education programs. Some areas in which exemplary programs are needed are:

1. Exploratory occupational education to provide practical and academic experiences essential to understanding the complexities of modern society and the diversity of opportunities in the changing world of work.
2. Activities to acquaint students with employment opportunities and to teach skill and knowledge required in families of occupations to expand employment opportunities.
3. Activities to provide students with educational experiences through part-time work which will assist in their maximum development and which will help link school and employment realistically.

As defined in the 1968 Vocational Education Amendments, an exemplary program is one concerned with stimulating and/or assisting in the planning and development, establishment, and operation of programs and projects designed to link employment and schools more closely for youth and to promote greater cooperation between schools and manpower agencies. For federal funding support purposes, these programs and projects may extend over a period not to exceed three years.

Following definition of terms, guidelines for planning and operating exemplary projects were developed. The guidelines for planning emphasize justification of the innovation. Planned change must be based upon an identified need for that change.

Planning for an exemplary project must be concerned with a problem, relevant information about the problem, procedure, anticipated outcomes, personnel, and resources. Careful planning will emphasize each of these aspects: (1) The problem should be specifically identified and delimited to insure success; (2) Objectives should be stated behaviorally so that performance can be measured; (3) A careful exploration of relevant information about similar problems may suggest a procedure or several procedures to be followed; (4) The procedures should be outlined and include a planned schedule of events; (5) Anticipated outcomes should be specified in advance; (6) Careful thought should be given to the type of student, professional, resource personnel involved; (7) Financial resources to accomplish objectives should be realistically planned.

Operational guidelines for exemplary projects differ to include specific administrative directions: e.g., division of program operation into phases, specification of contact agencies, instruments to be used, certification of personnel, facility utilization, dissemination procedures, and waiver procedures.

## Exemplary Programs

Although the 1968 Act will not become effective until July 1, there are several programs which are exemplary in nature being conducted within the present vocational education structure in Florida. I shall attempt to describe the programs and projects and identify unique aspects of each.

A curriculum guide for Junior High Work Experience Programs is being developed under the direction of Mr. James A. Davis, Consultant for Diversified Programs, Florida Department of Education. The Junior High Work Experience program, designed for potential early school-leavers, provides a curriculum which is preventive, remedial, and preparatory. Development of the guide began with a three-day conference last June. At a September conference program objectives and student behavioral goals were identified.

The program objectives are designed to provide students with an opportunity to:

1. Improve attitudes about work, school, and society
2. Improve personal appearance and hygiene
3. Develop personality characteristics of dignity, self respect, self reliance, perseverance, initiative, and resourcefulness
4. Achieve in the academic disciplines
5. Become effective in personal economics and develop an understanding of the economic system
6. Receive recognition through successful experience
7. Develop a realistic understanding of the connection between the world of work and study which assists them in becoming contributing members of society

Behavioral objectives for work experience students are designed to provide the kinds of guidance and experiences in school and on-the-job that will allow for directions and aid in personal adjustments, individual pupil motivations, and a desire to remain in school; purposeful flexibility in an effort to encourage students to remain in school, and to develop their thinking, self image and aspirations so that they may move back into the mainstream of the Junior High and Senior High curriculum; and the kinds of information and direction that would allow a student to move into the world of work if he or she must leave school.

Activities for program development will include a summer workshop for the twenty teacher-coordinators to design the remainder of the curriculum and to specify evaluative techniques. Next year, the curriculum will be field-tested by the teacher-coordinators. Final revisions will be made in 1970.

Unique contributions of the Junior High Work Experience provide the student financial assistance from a job so that he is able to remain in school and an opportunity to explore an entry level occupation under cooperative school-business supervision. The school assists with remediation in basic English and mathematics while guidance is offered in personal development of employability skills.

Using the "Introduction to Vocations" concept developed by Dr. H. E. Beam and Dr. Joe Clary, Mr. Burgess Meadows, Director of Secondary Vocational Education in Brevard County, developed an elective course for ninth grade students. Data collection for the third and final phase of the project is being completed, and a follow-up of students to determine effectiveness is planned for the future. To give you a brief picture, Brevard County was a static agricultural and resort area until NASA and Cape Kennedy developed. From 1950 to 1960, the population tripled and since 1960 has doubled. Occupational opportunities ranging from unskilled to highly skilled were abundant and were not related to production agriculture.

When the need for students to explore occupational fields and to make occupational choices was identified, the "Introduction to Vocations" idea was adapted for use.

The program is unique because it includes individualized instruction permitting the student to explore his characteristics, interests, and aptitudes; to relate these to various occupational areas; and to develop an occupational choice. Guidance from an instructor is available within the framework of the program. A significant aspect of the program is that the curriculum is proving beneficial to students from all income levels.

A third program of an exemplary nature which is in progress is in Columbia County under the direction of Mrs. Rose Bud McCloskey, Director of Vocational Education. The project objectives are to gather and assess information from a sample of culturally disadvantaged students in order to devise specific methods of facilitating an understanding of school, self, and employment.

Approximately twenty ninth grade boys, who were over-age, underachievers, and potential "dropouts", were selected as an experimental group with a matching control group. The instructional program for the experimental group consists of a class devoted to exploration of entry-level occupations, discussion of current events or items of interest. The students return to the teacher for a second class for remedial individual instruction. The principles of group dynamics are employed with the students. Although final testing results of the project are not available, observation of attendance records indicate that students in the experimental group are absent only for illness. The unique features of the Columbia County project have been commitments of instructional and administrative personnel, creative use of resources, and an understanding of the developmental and learning processes of youth.

Another exemplary program is being developed in Pinellas County at the Comprehensive Junior High School under the direction of Mr. Robert Sanfransky, Principal, and Mr. Joe D. Mills, Executive Assistant Superintendent for Vocational, Technical, and Adult Education. The major objectives are to reduce the dropout rates in grades 7-9 by providing an integrated approach to academic and prevocational studies; and to provide a new pattern of learning in preparation of students for the world of work.

The junior high program emphases are designed to present a solution to an educational problem though innovative experiences based upon laboratory or similar work situations. The principal purposes of the investigative effort are two-fold: (1) To strengthen the need for academic subjects, and (2) To provide students with rudimentary skills so that they will have a chance to obtain a job or enter a program of continuing education. The pattern will consist of matching the educational structure to the needs of each student. For those who flourish under the present system, the division of time between manipulative activities and academic courses can be so arranged that there is a minimum of the former. For others, the relative proportions can be almost continually adjusted to optimize their learning opportunities. Finally, for those who will leave school early or whose learning capacity is evidently limited, the experimental or working segment can be limited to a relatively restricted type of work, in contrast to the more varied experimental fare for the others. Thus, while still attempting to develop intellectual potential to the utmost, there will emerge a beginning skill in a specific area of manipulative experience.

The curriculum at the Comprehensive Junior High School is:

A. Academic Related
   - Communications
   - Family Living
   - Lifetime Sports
   - Mathematics
   - Science
   - Social Studies

B. Enrichment Arts
   - Creative Crafts
   - Field-Study Trips
   - Music
   - Performing Arts

C. Pre-Vocational Exploratory
   1. Service Occupational Areas
      - Applied Housekeeping
      - Commercial Babysitting
      - Custodial
      - Food Service
      - Landscaping
      - Personal Grooming
      - Waiter-Waitress
   2. Business and Distributive Occupational Areas
      - Business Organizations
      - Consumer Education
      - Clerical
      - Machine Operator
      - Sales
      - Typist

3. Industrial Occupational Areas

   Air Conditioning
   Auto Service Station
   Construction
   Engine Maintenance
   Exploring Engineering
   Metal Fabrication
   Photography
   Plastic Fabrication
   Radio-TV-Electronics

4. Junior High Work Experience

   On-the-job training

A unique aspect of the program is concern for the academic and vocational growth of each student.

Another exemplary program located at Booker T. Washington Junior High School in Dade County and under the director of Mr. Joseph Anderson, Principal, and Mr. Lowell Selby, Superintendent of Vocational, Technical, and Adult Programs, emphasizes an intensive and systematic development of basic vocational and educational skills:

1. It is an integrated curriculum combining general and vocational education.
2. It is aimed directly at improving vocational preparation of a specific and identifiable group in our society.
3. It attacks the problems of the culturally handicapped on four fronts simultaneously by: (a) demonstrating to students a close relationship bwtween what they are learning in school and what is required of productive workers in the work-a-day world, (b) including remedial education necessary for academic progress, (c) offering a program in diversified mechanics which will allow the student to develop for himself knowledge, skills, values, and attitudes through a cluster of occupational experiences.
4. It will utilize texts, visual aids, and other materials that have been especially prepared for the culturally disadvantaged student in the learning laboratory.
5. It will provide a specialized staff that will not only concern itself with the subject matter and skills of the experience but also with the physical and emotional climate in which the experience is offered.

Unique aspects of the Booker T. Washington program are creatively developed curriculum materials and the specialized differentiated staffing.

In conclusion, I would like to summarize the unique qualities of the programs and projects described. They are:

1. Identification of a need for planned change; establishment of workable objectives; planning realistically to achieve the objectives; and assessing the effectiveness.
2. Development of practical and innovative techniques, and creative use of available resources.
3. Commitment, enthusiasm, cooperation, and understanding of instructional, supervisory, and administrative personnel.

## Panel Discussion on

## CHANGES NEEDED IN SHAPING VOCATIONAL AGRICULTURE PROGRAMS IN THE FUTURE

J. T. Abrams, Teacher
South Edgecombe High School
Pinetops, N. C.

**There are many changes needed for shaping future vocational agriculture programs. Many of these changes have already been initiated in North Carolina. The majority of the changes that have recently been initiated need to be pushed at a much faster rate than many vo-ag teachers are willing to move. We will not explore all of these, but let me cite one or two. In North Carolina we have attempted recently to affect a great deal of change in what we used to refer to as the Supervised Farming Program. It has been modified into the Supervised Practice Program. In some cases too many of our agriculture teachers are still thinking of the feeder pig, the fat calf, or the fat stock show. I recall a young chap that I had just a few years ago whose Mother had great designs for this boy to be a veterinarian. I went along with her in trying to help this boy gain as many experiences as he could in this area. He was not capable of being a veterinarian. He enrolled in N. C. State and finally completed a two-year program in the Ag Institute in Agricultural Business Management. Today he owns, manages, and operates a 300-sow herd. I was not not thinking big enough for this young fellow or in the right direction. Also along this same line, many of us are still trying to inject the dollar sign into the Supervised Practice Program. There is still a column on the final report that calls for how many dollars this young fellow makes. It**

is not the purpose of the Supervised Practice Program to make our students financially responsible or to even become financially responsible for their well-being. What we really need to do is what our program is designed to do--to make the high school experience an experience of exploration, to look at the individual and the opportunities, and to broaden these opportunities as much as possible. This is a change that has been initiated but the teachers do not seem ready to put it into effect.

It appears that Agriculture 1, 2, 3 and 4, as so many of us recall, are still being taught and reported--I think in too many cases--as 701 or 705 point something. More Ag.1, Ag.2, Ag.3 and Ag.4 courses are being hidden in the 703 course than many of us are ready to acknowledge. It is purely a matter of facilities, equipment and dollars. We said yesterday, and it has been said many times during this Conference, that we can do a better job with the dollars that we have. This is true. I sincerely believe that I can do a good job with the FFA and teaching Agriculture 1, 2, 3 and 4 as I did so many years on a fairly limited budget. But fellow workers, when I attempt 705.1, Agricultural Construction, or 705.2, Agricultural Machinery and Equipment, I need the proper facilities and I need a better budget than is provided many of the vocational teachers in our state. For instance, it would be very difficult to teach General Horticulture without a greenhouse and adequate facilities. However, it is being attempted in some places.

Another change that has already been initiated but needs to be broadened is that some of our local administrators and guidance personnel are beginning to realize that vocational agriculture teachers cannot teach everything. As a result they are offering only what their teachers are prepared to teach and what the facilities can offer. Even so, too many teachers are tying to offer or to teach the whole of agriculture. In the future we are going to have to have more and more specialization on the part of the vocational agriculture teacher. It is impossible for a single teacher to know enough about the building trade to teach the 705.1, Agricultural Construction, and keep up with the changes that are taking place in construction and all other areas in agricultural education.

Perhaps we need to consider some changes that have not been started as yet on any appreciable scale. For instance, let us consider employing a horticultural major to teach General Horticulture and Greenhouse Management. This person doesn't necessarily have to be farm born, not even rural reared, but trained in the area in which we expect him to work. Again I think he would naturally be working in most cases under the direction of a vocational agriculture teacher and certainly under the close supervision of county and area vocational directors.

Let's take a look at the work load. Let's consider providing assistance to the teachers of high school students similar to that given in the Adult Education Program here in North Carolina. In other words, if I need a brick mason to teach that six weeks unit in Agricultural Construction, provide me with the funds so that I can employ a brick mason on a temporary basis to do this. If I need a veterinarian to handle a small unit, give me this assistance financially. We are going to see this coming more into the future. We let a "beautiful rose" slip our hands when we closed out the Veteran Farmer Training Program and the manner in which it was operated. We failed to carry it over into our high school program.

Let us now consider what really is a fair day's work. Why does it take vocational teachers 16 hours or more to have satisfied employment for one day. Classroom teachers here in North Carolina have been asking for "time to teach" for years. Thirty-five students in an American History class and twelve students in Agricultural Machinery and Equipment class create problems upon problems with the administrator in scheduling. It creates problems of misunderstanding and friction among the faculty. But we are going to have to see some drastic changes in the future in providing the vocational education teacher with time--first, to prepare himself professionally, to prepare himself and the teaching situation, and most of all to provide him with time for follow up in our Supervised Practice Program. We have got to realize that this cannot always be done after school hours. Too many teachers are still expected to teach five or six classes per day, hold forth for three or four hours at night and then sign in the next morning at eight o'clock and run the same gamut again. We have got to give more consideration to the work load. Just what is a reasonable work load for a vocational teacher, considering the hours and with not so much respect to the number of students?

Let's consider, also, an area of regional public relations personnel. Or maybe, better still, acknowledge this as one of the definite roles of the County Vocational Director. The vocational teacher has always been on the defensive in trying to sell the program. He has had always to be a public relations man. I think we still will, but we are going to see some drastic changes in this area. This is a total school problem--that of public relations. Most problems of today between the school and the lay people lie in the fact that there is poor communication. People just do not know what the program in the school is and what is going on. If we are going to move farther along this line of public relations, we are going to have to learn this lesson from the Extension people. They have done a beautiful job in this area.

Let's consider another 705 course. Call it FFA, call it Agricultural Leadership, whatever it might be. It has been said that we probably couldn't teach this in a course. But to me, it appears to be a good way to keep the FFA "goodies" in our program. In too many instances, this valuable phase of vocational agriculture has been pushed out of the school day into the after-school hours. And we have heard testimony here in the last couple of days as to the tremendous value that the FFA has to the youth of North Carolina and the other states. It seems to be an excellent training ground for many of the desirable traits that Mr. Lane pointed out to us and if this be the case, and I certainly feel that it is, we need drastically to make better provisions for the on-going of the Future Farmer Program. It is a little more difficult when you are teaching forestry to work FFA in it. I know that we can develop an individual forestry entry in the contest, but to work FFA otherwise is a little more difficult.

One other area we need to take a look at is working with student teachers. Let's consider some drastic changes in the student teaching program. Most of the future programs of vocational agriculture in North Carolina are going to be handled by today's student teachers. We need to take a long look at a year of internship, or better still, we could take a closer look at broadening, and I mean a real broadening, of summer experience. I believe that we could get some financial support for placing student teachers each summer with master teachers or teachers who know the program and can lead and direct these student teachers. I believe all of you will agree with me that the short period of time now that we have student teachers is just not sufficient for them to gain a complete insight into the great needs that they will have when they come into the program.

These are some of the changes that I think must take place if vocational agriculture is to continue to grow in the future.

Panel Discussion on

## CHANGES NEEDED IN SHAPING VOCATIONAL AGRICULTURE PROGRAMS IN THE FUTURE

John Tart
County Director of Vocational Education
Johnston County Board of Education
Smithfield, North Carolina

The changes that we are going to see in vocational agriculture in the next few years are going to be far greater than the changes that have occurred over the last one or two decades. Those of us that have been in the profession for any length of time realize that there have been a lot of changes. We are very much aware of the multi-teacher department and new curriculums. This trend will continue to expand. We are aware of the fact that we are going to have more vocational programs in our high schools--a variety of vocational programs. As time goes on we may see a decrease in the enrollment in vocational agriculture. However, this is not necessarily true because it has been my experience in observing some consolidated school programs in the last few years that you see two trends taking place in vocational agriculture enrollments. One is that poor teaching in vocational agriculture results in a very drastic drop in the enrollment of the agricultural classes. Where you have good, dynamic wide-awake vocational agricultural teachers, you see these programs increase in enrollment, and, in fact, additional teachers are quite often required. This may not be true in all cases, but in the schools that I have observed it seems that they go in one of these two directions. So in view of the fact that we are going to have more multi-teacher departments, we are going to have more vocational programs, we are going to be involved in larger schools; I think it very well to go

106

back to the sociologist on Tuesday and apply one of his points to vocational agriculture teachers. That is, we must be able to get along with people. Not only is this true with the student who goes out and works but it is true with the teacher in his relationship with other teachers within the department and within the school.

One of the real changes that is becoming quite apparent and one we must cope with more in the future is that the vocational agriculture teacher does not have his "little kingdom" today in these consolidated schools as he had a few years ago. Many of you have experienced this kind of thing. There is a tendency today for the teacher to be just another cog in the total wheel of education in the school program. (Some would say this is good; some would say it is bad.) But you will not be the only vocational agriculture teacher; you will not be the only vocational teacher. You will not be the only teacher who can repair something for one of the other teachers. Quite often in the past this has been one of the things that the vocational agriculture teacher could do that won the support of other teachers and the principal in the school. There will be many other vocational teachers who can do these things. You will find that the vocational agriculture teacher in the future doesn't have the influence on the people in the community that he once had. In the past the vocational agriculture teacher was called on for many things at all times of the day and night. I suspect that this may not be so true in the future as it has been in the past. As our schools become larger and consolidated, there seems to be a trend toward a school oriented vocational agricultural program in contrast to a community vocational agricultural program. As we go into larger schools, the school moves away from the people. It seems that the people are satisfied to receive less. They don't expect the vocational agriculture teacher to be around and visit quite as often as they did when he was in the neighborhood school. The area is larger and he may not know everybody.

Many vocational agriculture teachers have been able to call over the name of every person in their school district, particularly the farmers. This is no longer true because you can't work as closely with individuals. In larger schools we must go to cooperative programs. One of the changes that we are going to have to make is to accept enthusiastically and develop a cooperative program with industry and business. This is going to be to the benefit of the vocational agriculture teacher. In the small school the vo-ag teacher is often overloaded--has too much to do. In a cooperative program, it is generally accepted that 30 to 40 students is a full-time load as contrasted to maybe 75 or 100 students in the conventional types of vocational agriculture. The co-op program will tend to reduce the work load of the agriculture teacher. Cooperative programs may be the most economical way for a student to learn an occupation. The community furnished the laboratory and the teacher. The vocational teacher does the coordinating and the supervising. We are going to see in the immediate future the expansion of the co-op agriculture programs.

Some important decisions must soon be made in the area of Adult Education. We should ask ourselves a question--do we really expect vocational agriculture teachers to have adult programs? Has the secondary school system really accepted Adult Education as an integral and important part of its program? The answer is no. The secondary school system has not accepted Adult Education. It certainly does not have anything today to do, here in North Carolina at least, with Adult Education except in minor respects in agriculture and home economics. Distributive education and trade and industrial education are completely out of the field of Adult Education within the secondary school system. I think the question has to come up--are we headed toward a type of vocational agriculture in which the agriculture teacher is concerned altogether with high school programs with the adult program in some type of post-secondary school system. The answer to this question is going to have to come about and is going to take some statewide leadership. If we are going to continue Adult Vocational Education in agriculture, then the state leadership is going to have to develop policies which will guide school principals and superintendents. Generally today a person works eight or nine, not over 10, hours per day. In our society you cannot expect an individual to put in 15 or 18 hours of work a day. So if agriculture teachers are going to do adult work, they must be given time to do it. If you teach a high school group of students all day, it just doesn't seem that you can expect a teacher to teach adults at night. In addition, I think adult programs would be much more effective if we have them in the daytime hours instead of at night as has been the tradition.

We need to ask ourselves the question--Could we do a better job in many instances if we had a very close cooperative relationship with other vocational programs. Could you as an agriculture teacher really do a better job teaching some phase of distributive education than the DE teacher can. And could the DE teacher or the ICT coordinator or the auto mechanics teacher do a better job helping you with some of your students. There are places where we can practice team teaching or we can switch some classes which will make us more effective and, overall, we will develop a student who is better prepared to go into the labor market.

There are many other things we could talk about in our small schools that are real problems such as how are we going to provide for the kinds of vocational education that the national legislation demands. The state and federal plans indicate that ample consideration will be given to the vocational needs of all students in all geographic areas. It seems to indicate that in the future vocational education is going to have to make available the kinds of programs that are needed by all the people that need training. Dr. Rogers brought out, for instance, that vocational agriculture and home economics are the only vocational programs that are offered in many of our small schools; that they meet less than 25 percent of the job positions within the manpower structure. Programs must be designed for students.

We need to consider the possibility of bringing into our program some additional ideas not strictly related to agriculture. In small schools we need to expand our vocational agriculture program to include some nonagricultural type occupational skills. Dr. Rogers made several points, one of which I want to mention. He says we need to develop some clusters of occupations because of the many times that an adult will change jobs. If trained for one particular type work, it may be outdated within a few years. So we need to consider the possibility of developing some clusters within our agriculture programs.

We started making some real changes in vocational agriculture five or six years ago in North Carolina. I think we were a few years too late in starting these changes. However, some real progress has been made and I believe the future looks encouraging for well-planned programs of occupational training in agriculture.

## Panel Discussion

# CHANGES NEEDED IN SHAPING VOCATIONAL AGRICULTURE PROGRAMS IN THE FUTURE

J. L. Branch
State Supervisor of Vocational Agriculture
State Department of Education
Atlanta, Georgia

As we approach this subject, "Changes Needed in Shaping Vocational Agricultural Programs in the Future," we must take into consideration the impact of the 1968 Amendments to the 1963 Vocational Education Act. It is significant that these laws are written to provide money for the maintenance, expansion and operation of existing programs. Because of changes in the law we are given some guidelines for the development of all types of vocational education programs. There are some thrusts of this law that we must take into consideration. One of these thrusts certainly is the involvement of laymen. This law says there should be extensive planning at the local level and the state level. All of us in this program have been very much involved in state and local planning recently. Another thrust of this law is in reaching the handicapped and the disadvantaged. The importance of this area of work is indicated by the fact that funds were set aside to insure that this job be done. Another thing that we must take into consideration is that these programs will be measured at the state level and at the national level by how well the manpower needs of this nation are met. Now we must face this whether we like it or not.

In keeping with the law that we must have programs in light of manpower needs, we need to know what the manpower needs are within a given area. We know a lot about the State of Georgia with reference to agricultural production or farming. We know how many people we have; we know what we get in Georgia as far as agricultural production and income are concerned. But we do not know what the opportunities are in the broad sense of agribusiness. I submit to you that we know some of the opportunities and they are tremendous. We do plan to make a study in metropolitan Atlanta of the opportunities in ornamental horticulture. At present, we feel that they are tremendous. We've been in Cleveland, Ohio, and studied their program; and the program we plan for Atlanta Public Schools in ornamental horitculture will be somewhat patterned after what is being done and has been done for a good while in Cleveland. We need to know throughout the State of Georgia what the job opportunities are in the field of agribusiness. This is needed badly as we project programs in the future. With this information we will have a better basis for planning vocational education needs.

It gives me a lot of concern that every time we see agricultural jobs listed in any kind of a survey they are really what kind of jobs? Farm, aren't they? We are not getting credit really for the total agricultural industry with reference to jobs. And then, whether we like it or not, we must give consideration to projected programs for the disadvantaged, the socio-economic and educationally deprived. I know this is a big order within itself. But we, by the very fact that money has been set aside by the federal government, really have a mandate to do work in this area. Two or three specific points here. In my opinion, vocational agriculture in the future will vary tremendously from school district to school district. In other words, around Tifton, Georgia, where we are big row-crop country--tobacco, corn, peanuts, cotton, etc.--the type of agriculture will be entirely different from that of Carver High School in the inner city of Atlanta.

They will be different; they won't have much in common. We will have more programs in the urban centers. Ornamental horticulture is one of the programs that we will have a lot of in the urban centers. We are already in urban centers in Georgia--Savannah, Brunswick, Macon, and going into Atlanta. Agribusiness will have a place in these metropolitan centers. As a matter of fact, if we can make a success in Atlanta, the Director of Vocational Education for the Atlanta Public Schools tells me that he would like to have 25 agriculture teachers. This is fantastic. This is quite different from what we have had, I will assure you that. As our responsibility and our perspective have been broadened, we will have more teachers of specialized courses in the urban areas. At the same time, in the real farming areas we will have programs that resemble what we have been having, perhaps for a good while. We have tried to make for the past two years, even prior to the 1968 Amendments, some studies and map out some needs that we have in vocational agriculture in our state. We met with the State Board of Education last September and presented ten recommendations for the program in Georgia. One of these was some teacher aides--not material--I am talking about people. These are particularly needed in the ornamental horticulture programs where a teacher has a big greenhouse. You know this is an every day of the week job--Sunday included. We feel that if he is to do a good job, he needs some technician help in his program. That would be a teacher's aide. So we are recommending this use of technical assistance for these teachers.

We will continue to grow more and more into agribusiness or off-farm agricultural occupational training. Production agriculture is important; it is still the backbone of the program, but we will continue to shift emphasis from production agriculture to off-farm agricultural programs. Our State Plan shows more and more of our teachers involved in off-farm programs.

Now I would like to discuss the adult program in Georgia. My predecessor mentioned that his interest was in adult education. We are dedicated to the proposition in Georgia that we will continue an Adult Young Farmer Program in vocational agriculture, and it will not be the prerogative of the area technical schools to do this job. This also will be done through the local high school vocational agriculture departments with the assistance of area adult teachers. We have faced two facts that are most important. One is that our teachers are overloaded with in-school students. The other fact is the changing technology in agriculture. Every vocational agriculture teacher cannot keep up with all the things going on that is of importance in helping farmers. This brings into existence the area adult teaching program. For example, we have an area teacher in Northeast Georgia who is specialized in the area of agricultural mechanics. There are several areas in this field of which he is rather expert. The regular teacher of agriculture in the geographic area in which he works requests the services of the area teacher for particular programs in agricultural mechanics. The regular teacher organizes the class and the area teacher does the technical teaching. The regular teacher gets credit in his annual report for this class. We have 14 men in agricultural mechanics, 4 livestock men, 2 foresters and 1 man in agribusiness. This past year, these 21 men taught upwards of 7,000 farmers. In addition to this, high school teachers taught many farmers. We want more young farmer teachers, but at the present time the expansion of this program is a budgetary problem.

We feel that adult education is most important and area adult teachers form an important facet of this program. We are very proud and appreciative of our State Board for giving us the privilege of carrying on this type of adult education program. We feel that in the high school program we will continue to move into the off-farm occupational education areas. We do have in our agricultural mechanics program a cluster type approach that we think is good. These boys may go into jobs that are not necessarily agriculture. If you learn to weld in agriculture shop, you know how to weld as well as if you learned somewhere else. If you learn electricity in a vocational agriculture program, you know electricity as well as if you learned it elsewhere. We feel that agricultural mechanics has a lot of carry over into the world of work today.

We hope to take advantage of some of the facets of the new law. An example is Section G of the law which is the new co-op program. We hope to have three of these in agriculture this year in Georgia. They are designed for the disadvantaged and socio-economically deprived. There are funds provided here that you can use differently than in our regular co-op programs. We hope to have our share of these and other exemplary and innovative type programs where they really help to involve the rest of the school faculty. We take potential dropouts and try to do something with them. As we shape the future of vocational agriculture, we cannot overlook these types of programs. We should be ever alert to take advantage of all the new facets of the law, and I am sincere when I say that the future of vocational agriculture is limited only by our ability to plan and execute. We must accept the challenge.

# LINKAGES OF VOCATIONAL AGRICULTURE WITH OTHER ORGANIZATIONS AND AGENCIES FOR THE FUTURE

Selz C. Mayo
Professor and Head,
Department of Sociology and Anthropology
North Carolina State University

## Introduction

The future of vocational agriculture will depend on the development of some very big men -- tremendous men in the community, county, area, state, and nation. I am referring to both professional and lay leaders. This will necessitate professional men with new and appropriate training and experience for the new roles to be performed. Also, it will mean men with new and appropriate connections -- linkages with new systems.

In 1968 only 5.2 percent or approximately 10.4 million Americans lived on farms in this nation. This means that the farm population declined by about one-third between 1960 and 1968; and, the decrease continues. Even with the Census definition of a "farm," the number of farms has declined to something in the neighborhood of 2.5 - 3.0 million. However, we must be aware that the horizon of the vo-ag program has been over and beyond agricultural production per se.

What I will outline is an impossible task - improbable at least in terms of program content as well as in terms of establishing whole new sets of role relationships. What will be needed in terms of the future is -- as of now -- impossible. But, we must try!

The term link or linkage is used here in a general or common use sense. In a fairly recent dictionary, the term link is defined by such expressions as "connecting structure," "connecting element," and "unit in a communication system." Linkage, then, is viewed here as the dynamic process of coming together as well as the actual status of being linked.

## Discipline Linkage - A Case Study

At the outset, please let me plead a great deal of ignorance of vocational agriculture in terms of its trials and its errors over time. At the same time, I am not as knowledgeable as I should be concerning the opportunities and responsibilities of vocational agriculture -- the contribution of agricultural education to the American way of life since the passage of the Smith-Hughes Act. My ignorance concerns both the past as well as the present status of the program.

At the same time, anyone who would attempt to look into the future -- either far or near -- surely must be accused of being ignorant, or in the most modest of terms, of being stupid as well. Nevertheless, this was my assignment and I accepted it. Therefore, I would ask you to be both patient and understanding, and please judge this analysis and this presentation in terms, perhaps, of a generation hence.

Nearly two decades ago, Dr. C. C. Scarborough, an agricultural educator, and I, a sociologist, entered into a far-seeing and a far-reaching conspiracy concerning the growth and development of vo-ag, at least in the State of North Carolina. (Cayce is here this morning to defend himself.) Dean J. Bryant Kirkland, who is here today to speak out for himself, acquiesced and gave us the green light, so to speak, to proceed with this seemingly "way out" experiment. At the same time, I must give credit to Dr. C. Horace Hamilton, who was Head of my department at the beginning. He gave me both the encouragement and the opportunity to enter into the linkage of disciplines as herein described.

The specific question raised in the experiment was the following: Does sociology have anything to contribute to the development of a viable program in vocational agriculture? In my biased opinion as a sociologist, the answer to the question is yes -- but, the specific contribution depends as much or more on the participating sociologist as on the descipline *per se*. In any case, I am very proud of and ever mindful of the fact that I have been awarded a certificate of honorary membership in the vo-ag teachers associations of North Carolina.

Then, may I state simply that I am grateful to Cayce, Dean Kirkland, and to C. Horace Hamilton for providing me with the opportunity to work with hundreds of local teachers of vo-ag. It is my hope that this linkage has made a contribution to these teachers as they go about their daily and nightly business of making their own contribution to the life and labor, to a better way of life for all our people. (This program has been described and it is not detailed here.)

It is a reasonable to assume, it seems to me, that in the vo-ag teacher-training institutions there will be developed new discipline linkages; and other linkages will be either broken or will be less firm. Biased though this opinion may be, it appears that the social sciences will play an enlarged role in the training of teachers and hence in the total vo-ag program in the future. In turn, it seems to me, that this will make absolutely essential that in-service as well as graduate degree programs be expanded almost everywhere.

## Linkages with Existing and New Organizations and Institutions

There will be many new and intensified linkages within the school system. There have been many tenuous relationships throughout the years. As events and programs are turning, there will be ever closer interrelationships or vo-ag with the biological sciences as well as with the physical sciences within the high school establishment. (The place of vo-ag in the junior high school system is not clear at this point, but this may be one of the great opportunities in the years ahead.)

It appears obvious that there will be increasing linkages with the other so-called occupational or vocational or technical areas in the school establishment. The "general" education and the "occupational" are not that far apart; and, certainly the various areas of vocational education are not separated by an iron barrier. The barriers appear to be philosophical, ideological -- plain bias; and, these areas have much to learn from each other -- and the barriers are really no more than paper-thin.

Within the local community but outside the school system, there are a multitude of opportunities -- really responsibilities -- for new and expanding linkages. One of these may be viewed in terms of crossing racial and ethnic barriers generally -- east, west, north, and south. Crossing these barriers -- especially the racial barriers -- will necessitate linkages with a whole new set of organizations including an understanding of new leadership structures. Personal observations and some explicit evidence show that the racial groups -- in a previously segregation setting -- know very little about voluntary organizations in the world of the other. They know practically nothing about the activities of the "out" groups and the same thing may be said in terms of community activities and leadership structures.

Civic clubs of many sorts play an important role in most communities. Vo-ag must have important and certainly informed linkages with such organizations. Many of the civic clubs -- community organizations -- have committees labeled variously as: agriculture, town-country relations, rural-urban relations, and a host of other typical concepts. The important question becomes: How do the teachers of vo-ag work effectively with these organizations?

During more recent years, there has developed -- been developed -- a planning group (both voluntary and legal) in most of our communities, rural and urban. In the smaller communities, these are purely voluntary groups but in the larger communities, one body is legal while the other is voluntary. The vo-ag teacher must determine how he will relate to such programs. Certainly at this time, the rules, the roles and the relationships are not clear and focused. Nevertheless, this is an area of immediate concern and a host of decisions must be generated.

Linkages must be considered in relation to a host of organizations at the county level throughout the nation. As indicated above, legal as well as voluntary planning bodies have emerged in county after county. Such groups may be either generalized or specialized -- industry foraging on the one hand or hospital building on the other. Nevertheless, these bodies offer the vo-ag teacher ever expanding opportunities for service in terms of improving the environment of the local community.

At the same time, a very large number of area associations -- multi-county units -- have emerged and others are in various stages of development. Most of these area associations are multi-purpose and include such functions as agricultural development, industrial development, travel and recreation, and community development. Decisions - decisions - but decisions must be made relative to linkages. Too multi-county units designated as regional planning commissions are being created. Two such examples may be cited -- the Appalachian Commission and the Coastal Plains Commission. These developments raise some very real problems for the leaders in the program of vocational agriculture. Pressures have been on the development of realistic programs at the community-school level. New times and new situations must be faced and fresh decisions must be made.

New and expanding opportunities for linkage with private enterprise offers a real challenge for the future. This is the point at which the whole complex of agribusiness comes into clear focus. The strength in vo-ag in historical perspective has been the decision-making process. In this context, the boy has been given an opportunity to make decisions in terms of his project and his program largely in relation to agricultural production. The decision-making process was and is the distinguishing characteristic. Now, the question is, how is this process of decision-making to be maintained in relation to projects developed with the private-enterprise sector?

### Linkages with Population Aggregates

Historically, vocational agriculture has been male dominated. This has been the case in terms of teachers, high school students, adults in classes, and in terms of services. Some significant changes must be accomplished if vo-ag is to make its major contribution in the future. Such an emphasis has been quite natural under existing circumstances. But, the farms, the decisions and the harvests have never been as completely male dominated as the teachers and the administrators have apparently assumed or considered.

Females, women, mothers and grandmothers have been much more influential in agriculture than vo-ag teachers have considered. We do not have exact figures -- data -- but our more general data show that older women control a very large proportion of farmland and, hence, farm production. Many in this category, not only control but operate much of the productive farmland.

Opportunities for the vo-ag teacher, however, are much greater because women are either the decision-makers or the partners in decision-making for a substantial proportion of our agricultural production; and, the same case could be made for agricultural marketings. Although data are not available, it would be interesting to know something about the place of females in the processing and distributive aspects of agricultural products. Not only now, but in the future women are and will be major decision-makers in a large segment of American agriculture.

At the local level -- school - community -- the vo-ag teacher must make major decisions in terms of garden clubs (a host of other names) and these are female dominated. One of the major decisions is in relation to training versus service. Many such groups may be interested in either generalized or specialized training for the total group. However, many of the women may need and want specialized services as contrasted with community-wide services. A decision must be made in terms of individual time allocation and program development.

Youths and youth development must be given consideration -- additional consideration. Vo-ag teachers in the past as now have been very close to a larger segment of the boys in the smaller high schools. Such fortunate boys and a few girls have been given an opportunity to develop their leadership skills in a multitude of situations. Very few groups in our high schools have been given an opportunity to develop potentiality for leadership in a higher situation. Such skills and abilities have shown up on the college campuses across the nation.

The development of a youth's potential is a wonderful thing to behold. Too, the development of youths' potentiality in terms of individual development and in terms of group development is a wonderful exercise in leader-development. Community leaders as well as leaders across the state and nation have been developed in this decision-making context of vo-ag. Aspirations have been enhanced and occupational or career-choice hopes and expectations have been strengthened.

Linkages with the producers of agricultural products must be strengthened. Very large commerical producers are within the province of the local vo-ag teachers and their vo-ag program. Such commercial producers will have close working relationships with a host of information sources. In each community there are and will be for some time a number of producers who will need the direct assistance of the vo-ag teacher. Such linkages, however, must be considered in relation to contracts, production techniques, processing, and marketing formations.

Another aggregation faces the teacher of vo-ag at every level -- the poor, the low-income, the below poverty, etc. The poor is an aggregate indeed; and, what does vo-ag have to offer to this category? The point, here, is that a host of units/organizations/etc. have been and are now involved in relating programs to local and state situations. In an affluent society, what does vo-ag have to offer in relation to communities, counties, and special interest groups in this context?

A host of organizations, task-forces, commissions, etc., have been structured in relation to the poor -- the people left behind, yesterdays' people -- etc. How is vo-ag to be related to these groups? Such organizations have been established at several levels -- community, county, area, region, etc. How is vo-ag to be related to these various structures in the future? The point is, however, that, in my opinion, vo-ag has a major contribution to make. At the same time, I must confess that vo-ag is not now structurally organized to make its maximum contribution to this problem.

## Linkages with Old, New and Emerging Problems: Needs and Opportunities

Old problems are with us always, but new problems arise, apparently, that are either peculiar to or associated with each generation. Problems which, in the past, have been local in nature are now almost national in scope. Problems in the natural resource area as well as in the human resource area face the vo-ag teacher (and program) on the local, state and national level. How will the vo-ag teacher, at the local level, face up to these new problem areas? More importantly, how will the total system react to and respond to these new responsibilities and opportunities?

It is not necessary to document these problems at this point in the discussion. I could relate, as could you, the magnitude of one or more of these problems at the community level -- yours and mine. This list is mine and I am sure that you have or could construct a very different list of problems.

This problem list is not new to any of you in this conference. I have attempted no priority, whatsoever; and, the listing is in no way intended as a priority system. Your listing should be compared with this one -- mine.

1. Water. There are a multitude of problems relating to water, its distribution and its use.
2. Air. The cliche' is that the air is free, but it may not be pure. The local community may be impotent to do anything about air polution but each community must cooperate.
3. Land. Land supply is not inexhaustible even in this expansive country of ours. Man must be adaptable in relation to his distribution across the landscape. Each man and every family must meet other men and these in turn must consider their total in relation to land, water and other natural resources.
4. Housing. Housing is a part of the necessity complex of shelter, clothing and food. In turn, housing is related to a host of other problems. In terms of available data, housing, adequate housing, is one of the great jungles as yet unconquered; and a great problem as yet unsolved. In rural communities as well as in urban, how shall vo-ag relate to this need in America?
5. Low income - poverty. During the last decade or so, considerable emphasis has been placed on the elimination of necessity-deprivation in our society. The adult program of vo-ag seems to offer an approach to this problem. Increasing the aspiration level of youths is another possibility. Other possibilities, other potentialities, and other opportunities must face every teacher of vo-ag. The literature is

abundant and solutions are stated in "glib" form, but real answers are still in the making.

6. Jobs and occupations. Unemployment rates are very high among youths. Such data show up on every hand. Drop-out rates are very high and this leads to high rates of unemployment among our young people. Rural young people, by the thousands, migrate to urban centers in the search of jobs. Many of these young migrants have not been adequately prepared to fight the job-market in larger cities of America. Does vo-ag have an opportunity and a responsibility in this sphere of life and labor?
7. Consumer education. Each vo-ag teacher has a wonderful opportunity to do a constructive job of teaching youths as well as adults in terms of consumer education. This area of education involves both the quality and quantity of supplies but it entails the economic aspects of supply and demand. The vo-ag teacher, along with the teacher of economics and home economics, has a major opportunity here.

Such a listing could go on and on because the problems are limitless. Those cited above are examples or illustrations, hopefully, of the total range of problems which may be related to vo-ag in our total society. For example, the search for jobs is very intense in North Carolina, and this is especially true in the Coastal Plain (including Tidewater) and in the Mountain regions of North Carolina. Patterns are very observable in other states and regions with respect to job searching. Jobs -- employment -- are especially scarce for those youths with low employment skills; and, to some extent this is equated with educational attainment.

Vo-ag cannot do everything for every problem and vo-ag cannot be everything to every situation. The vo-ag teacher, however, has been trained in terms of organizational skill, leadership development procedures, technical agriculture, and community analysis. Surely, the utilization of these overall areas of competency may make for a better life and labor for all our people.

## Conclusion: The Great Crystal Ball!

1. It is quite possible that the next great opening, future, and landmark in vo-ag will be in the urban environment of America. The next great area of public service for the vo-ag teacher may be in the large cities of America. At the school level this may mean a great and exciting new relationship with the teachers of biology, zoology, soils, etc.

2. Among other things, the vo-ag teacher of the future may be called upon to give light -- green light -- into the great dark ghettos of our major cities. A lightening-up of these dark holes could have a tremendous impact on the residents. This might be an important factor for morale building for the future. Imagine the potential of "garden" clubs in the ghettos in terms of nostalgia on the one hand and future development on the other. The vo-ag teacher with training in leadership development and with organization skills might contribute something really worthwhile to the problems of ghetto life even though the training in the past has been geared to rural -- open-country -- living.

3. The vo-ag teacher (program) may be called upon for an input in the new, expanding, and developing public housing arena in our great cities, in our towns, and in our open-country communities. Providing adequate housing for a sizable proportion of the population is a major problem in our society. Hopefully, we have learned enough to know that urban renewal projects must embrace more -- much more -- than bulldozing down on the one hand and putting something back on the other hand. Many urban renewal projects need, yes, require,

personnel with the training given to the young men and the young women in programs of vocational agriculture. The term "young woman" is not used lightly in this context because with proper orientation many young women might be drawn into the vo-ag teacher training program.

4. Impossible? Surely, this is impossible. And as I stated at the outset, much of what I would have to say in the context of the title would be impossible. But we got two men close to the moon (later we got two men on the moon), so it would seem possible to think of what has been described above in terms of new linkages for the future. The image in the crystal ball is growing dim -- but the challenge for the future is still vivid. The picture of vo-ag teachers in dark, urban ghettos is quite clear in the crystal ball. But will man's image of vo-ag during the past half century stamp out the picture of a brighter tomorrow? The answer is . . . .